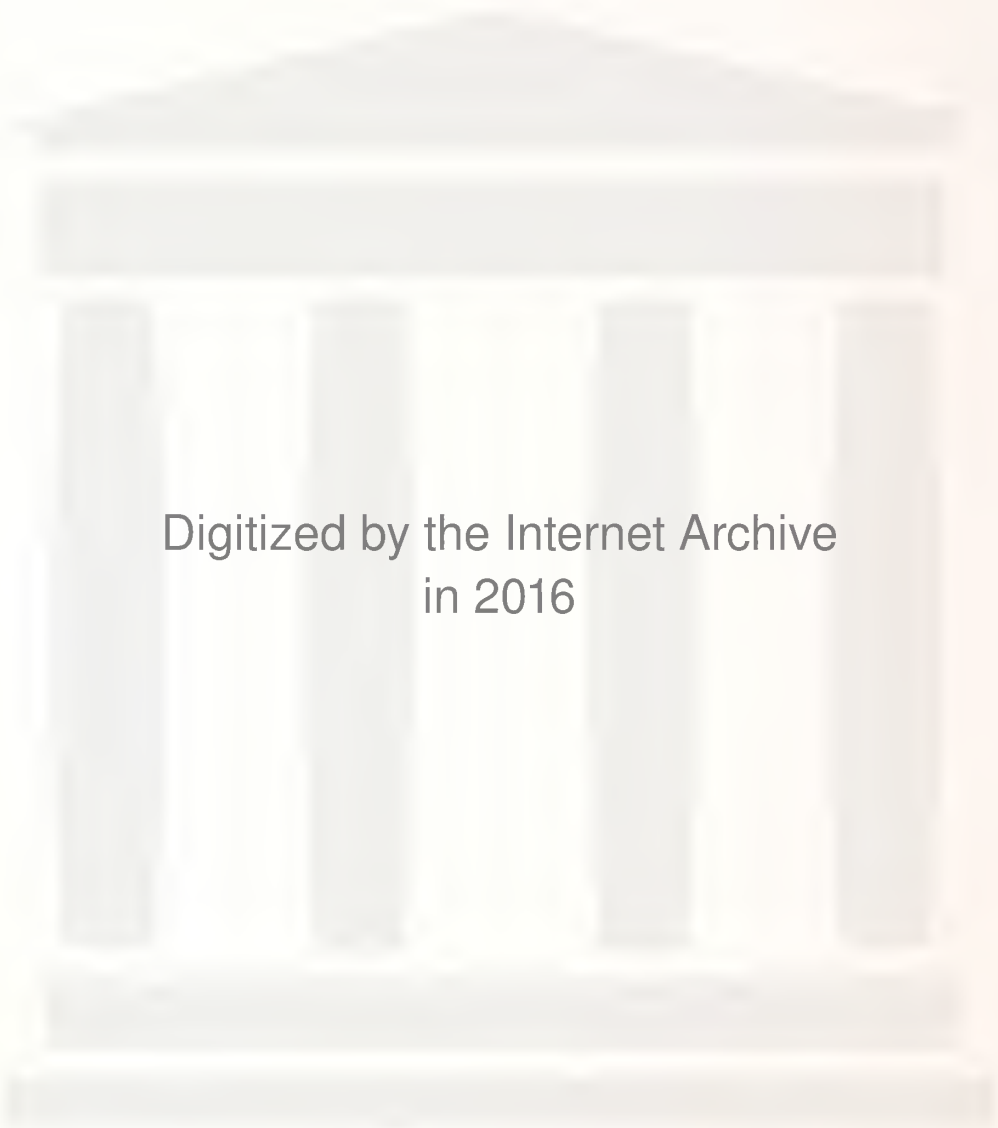
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JOURNAL of the Medical Association of the State of ALABAMA

ALABAMA PHYSICIAN
JULY 1975 -76

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Malpractice: Causes And Effects

Kidney Transplantation In The Pediatric And Adolescent Patient With End Stage Renal Failure

Hypertension Conference: A Review

AMA Delegates Report

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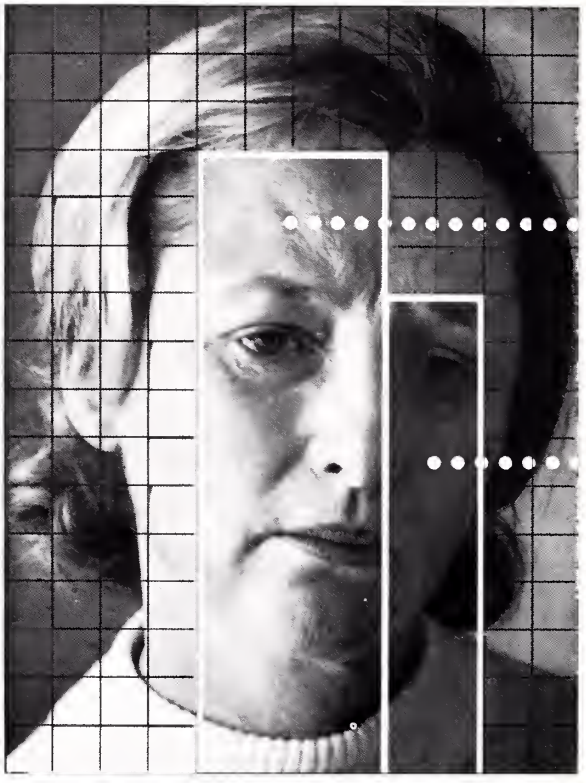
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Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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The JOURNAL
of the
Medical Association of the State of Alabama

VOLUME 45, NUMBER 1 JULY, 1975

Office of Publication
19 So. Jackson St. Montgomery, Ala. 36104
Subscription Price $12.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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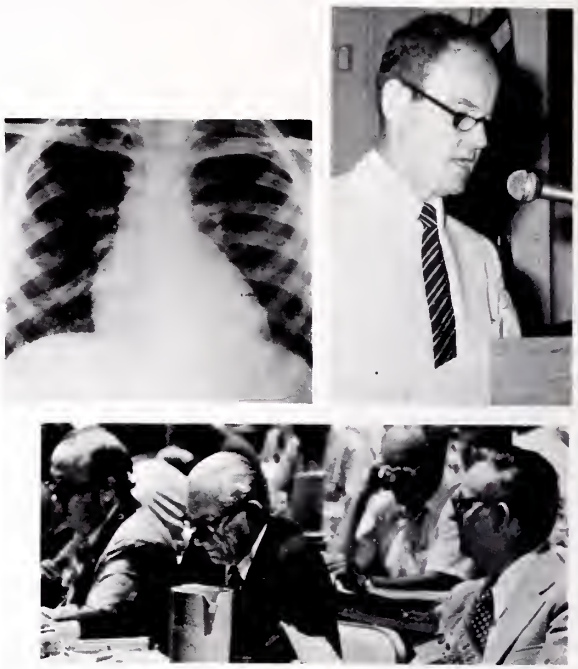
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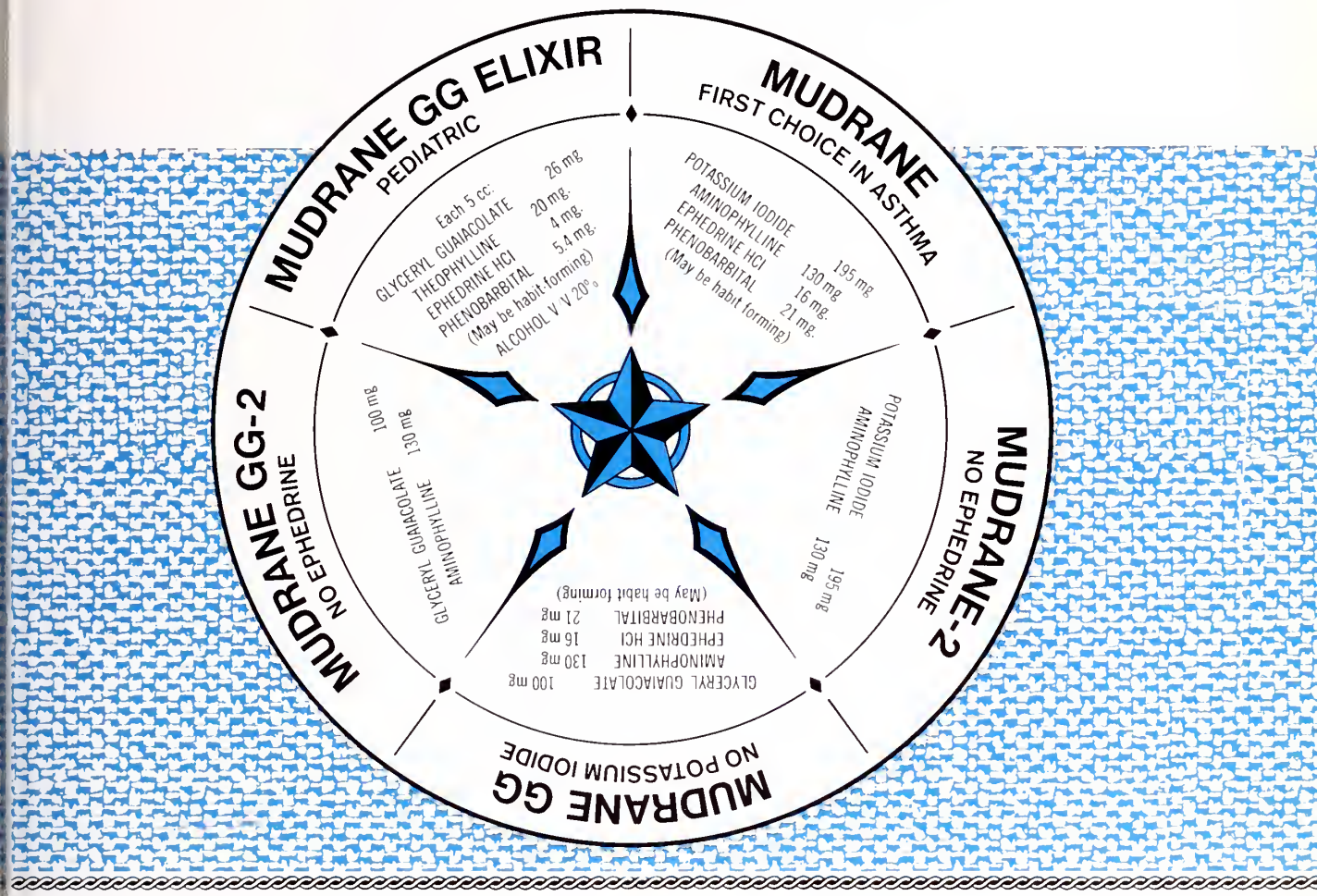
Kidney Transplantation In The Pediatric And Adolescent Patient With End Stage Renal Failure

Arnold G. Diethelm, M.D.; Wm. A. Sterling, M.D.; Joaquin S. Aldrete, M.D.; June F. Shaw, M.D.; and Jean M. Morgan, M.D. 21

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The MUDRANES

Discreet formulations of four well regarded drugs for the relief of bronchial distress—Potassium Iodide, Glyceryl Guaiacolate, Aminophylline, Ephedrine with Phenobarbital (to lessen cardiac stimulation).



INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarhital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may he habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23261



Now is presented the second regular edition of the *Journal* of Medical Association of the State of Alabama published in its entirety on the Association's own presses. Other state medical associations have expressed considerable interest in the "new *Journal*", commenting favorably on typography and general appearance. Some state associations have been especially impressed by the fact that the cost of the *Journal* has been reduced from approximately $1.10 per copy to less than $.50 per copy.

While this is important to the business managers, we at 19 South Jackson are much more excited by the fact that actual publishing time has been reduced from more than six weeks to two weeks.

* * *

What does this mean to our membership?

First, it means that we can bring you important information from Washington and elsewhere while it is still important. The President's Page and other feature articles, along with news reports, can be more timely. In the past, it has been impossible to anticipate the status of any given situation when things could change so drastically in the six-weeks interim required to set the type, print and distribute the *Journal.*

Important legislation could be introduced in the U. S. Congress or State Legislature and enacted into law before the news could be transmitted to our members under the old process.

This is no longer true today. MASA has the capability of halting any edition at any time to add or delete news reported which has been altered by later events.

* * *

It is also well to note that other state medical associations are showing great interest in MASA's capability to use this same printing equipment to provide its members with their office printing needs at approximately one-half commercial printing prices. Some 600 members are already patronizing the Printing Department. At times, it has become nigh impossible to fulfill our commitment of five-day service without bringing in supernumerary printers.

* * *

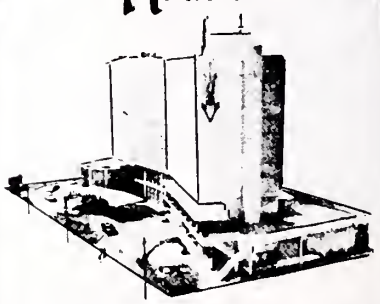
Here is a progress report on the MASA/Wausau insurance program. Our original objectives of 1,500 participants by August 1, 1975, has been exceeded and there are indications that the total will reach more than 2,000 by the end of this year.

in Brief

Professional liability hearings begin in June before the House Health Subcommittee. Emphasis will be on the financing and operating of insurance firms. Rep. Paul Rogers (D-Fla.), chairman of the subcommittee, said a major target of the hearings will be rates. The AMA has stressed its support for legislative action on the state level, rather than on the federal level, to alleviate the professional liability insurance crisis.

April's Consumer Price Index showed price increases in the medical care sector generally lower than those for March, but still higher than increases in the all items and all services indexes. Physicians' fees rose 0.7%, down from a 1.3% increase in March. April was the first month since November, 1974, that the percentage increase in physicians' fees decreased from the previous month's level, but it was the fourth month in a row that the increase was higher than the increase in the all services index, which rose 0.6% in April, compared to 0.4% in March.

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The restaurant of distinction in Birmingham. An elegant setting for enjoying the fabulous aged midwestern beef selected and brought direct from Kansas City for the Baron.

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Without a doubt one of the most beautiful lounges you have ever visited, with its unique statues and decor. A delight to have your favorite beverage served overlooking the pool. Entertainment and dancing nightly.

MESSAGE FROM THE PRESIDENT



Stop Abusing Our Judicial System

E. Vernon Stabler, Sr., M.D.

Again we emphasize individual doctor participation in State legislation is of paramount importance to our profession today.

Bills are before our lawmakers that will greatly affect every doctor in the State of Alabama. The fact is that many bills make or break health care as we know it. In view of such vital influence on each of us, our lives, our profession, our families, it is difficult to understand how so many doctors can be inactive in legislative affairs. Every doctor in the State should make it his or her personal responsibility to contact the Representative and Senator from his District and actually discuss our position as it relates to each bill that is to be voted upon. After the controls are on, it is too late. In fact, we have already allowed too many restrictions which are against our ideas of freedom in the practice of medicine.

Now before the House of Representatives and the Senate are bills of tremendous potential influence on each doctor in this State. These bills provide for the regulation and control of claims of bodily injury or death to a patient, setting out in great detail how, by whom and under what circumstances malpractice judication is to be regulated.

This matter strikes at our very existence. The general population as well as the entire health care community has been sleeping like children, in New York, California, Michigan, etc. and could not be awakened until shocking developments had already materialized. No insurance, or insurance at vast pending rates, finally aroused the medical groups in each of these states. Tragic means had to be resorted to in order to get action from the legislators. Now, these states are in emergency drives, strikes, defaults, retirements and other extreme measures of getting out from under the overburdening results of such negligence. This state of affairs results simply because no one acted until the disasterous situations were upon them. Surely we can profit by our sister states' experiences. Can we not act now—before the catastrophe—while we have a favorable insurance program? There seems at long last to be a favorable climate among the people of Alabama, and consequently for the Legislators, to face the problems and do something about them. The pending Liability Bill is the answer—it should be passed. It is fair to the patient, to the lawyer, to the public and to the doctor and health provider.

Of course, many self interested groups are against it. They have profited vastly in the last 16 years in the malpractice field—in fact, the malpractice racket. End results, often dramatically exhibited in the courtroom, are frequently the basis for claims of faulty practice regardless of how well the doctor has performed. Malpractice has gone from an estimated 600 to 700 cases in 1964 to an estimated 18,000 to 20,000 cases in 1975 with more coming all the time. The goose that lays the golden egg is too tempting for the unscrupulous not to jump upon it.

We must see that this legislation is passed, thereby protecting the health provider and the patient. Your definite, positive and urgent activity is needed to arouse and enlighten the public and your legal representatives.

The least each individual doctor can do is to speak to his Representative and Senator, preferably in person. If this is not possible, then phone him. Let him know that you are aware of, and back this legislation to end abuse of our judicial processes. Speak to 20 people in your practice or acquaintance. After you have done this much, then, and not until then, you may consider yourself having done your duty.

Carefully consider your responsibilities to your profession, to yourself and to your public and you will become very active in securing the passage of this necessary legislation.

The Profession direly needs the law—The public direly needs the law—You, individually, direly need the law—Our survival as a free, unhampered profession direly needs the law.

No other Malpractice Insurance Coverage fits the Doctors of Alabama so well . . .

The premium cost you pay for the Wausau Special Malpractice Insurance Policy will be based **only** on Alabama loss experience. So you don't pay to help cover losses in such "claims conscious" areas as Florida (Dade County), New York or California. No other insurance company has consented to these terms. Which is just one of the ways you benefit yourself – and the entire Alabama medical community – when you subscribe to this coverage. For information on additional benefits, contact **MASA Insurance Department, 19 South Jackson Street, Montgomery, Alabama 36104. Or call (800) 392-5668 toll free.**



THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA · 1873 ·

An Act For Our Time

Alabama physicians will be put to the test of their professional lifetimes in the weeks ahead as they attempt to inject muscle into State laws relating to their liability for services rendered.

The late and great Dr. Buford Word, upon his inauguration as President of this Association, observed: "This is a litigious age." He bemoaned the fact that members of MASA were facing a growing problem in the matter of cost and availability of professional liability insurance.

Dr. Word's concern was expressed long before other states experienced malpractice insurance crises which drove doctors to strike, to remove their practices to areas of lesser risk, or simply to close their doors and abandon practices and patients whom they had treated with competence and mutual confidence for years.

It is to the credit of Dr. Word and his successors – Dr. Orizaba Emfinger, Dr. A. E. Thomas, Dr. F. M. Phillippi, Jr., Dr. E. E. Camp, and Dr. J. G. Galbraith–and to the Board of Censors which backed them in their efforts, that MASA was able to stave off the catastrophe which befell every other Southern state.

In many states, physicians/surgeons' liability insurance coverage is rapidly becoming unavailable. In all others, including Alabama, costs are escalating some to the point where doctors are taking a hard view to decide whether they can even afford to continue practicing in such a dangerous climate.

To alleviate a crisis in this State which could wreck damage to patient and physician alike, MASA has labored to perfect a legislative proposal which should provide a long range solution. No single person now involved in this problem would be injured by enactment of MASA's bill. On the contrary, all parties (foremost among them being the patients, themselves) will benefit.

MASA's bill calls for changes in the law which would quickly resolve the issue at a minimum of cost to the legal profession, which ultimately is paid by the patient if his suit is successful. Compensation to the patient would be faster and greater than the present system now provides.

MASA has no desire to relieve an incompetent or careless physician of responsibility of his errors or omissions. In fact, this Association proposed, and the legislature enacted, a new Medical Practice Act earlier this year which will provide for the first time a mechanism for removing this type of doctor entirely from the practice of medicine. The Board of Medical Examiners has given evidence that it will take a harder look in the future at practitioners whose conduct brings discredit to the profession.

But it should be recognized that medicine is an inexact science and that no two patients react in exactly the same manner to illness and accident.

We must learn to differentiate between an act of God and medical malpractice, regarding always and foremost that the injured patients who have suffered lost of bodily functions, whose families are deprived of the necessities of life, needs all the financial assistance they can get.

They should not be pawns in a medical-legal ring-around -the-rosy!

editorials
editorials

The Art Of Persuasion

When a physician is called upon to make a speech, the usual answer is an uneasy "I'm too busy"– particularly if that physician would feel uncomfortable standing up before an audience. And yet, there are few things more exhilarating or more rewarding than educating and persuading a group of people.

Public speaking can be extremely fun as well as uplifting, and the satisfaction that is gained far outweighs the time spent in preparation.

All across Alabama, civic clubs, community organizations and professional associations are year-in and year-out seeking attractive program speakers. Subjects of medical importance are in the height of demand. People seemingly have an insatiable appetite for health these days. NHI and the current professional liability crisis are high on the requests for the "banquet circuit." Women's clubs would be interested in hearing about the care and feeding of infants, proper diets for teenagers or the hyperactive child.

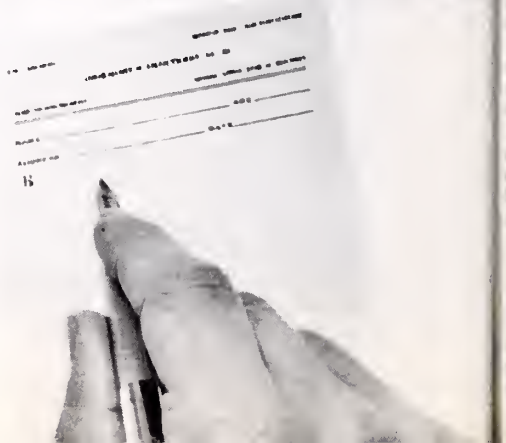
The practicing physician, armed with facts and figures, can provide a great deal of information and spread a considerable good will to service groups, Chambers of Commerce and other groups of laymen who know surprisingly little about subjects on which public understanding of the real problems is so vital.

It has been said the most rewarding feature of public speaking is the feeling that one is doing something worthwhile while imparting knowledge through the "gentle art of persuasion." In the April, 1975 issue of *Physician's World,* an Ohio family physician shares the story of how he got his start in "group persuasion." He was complaining one evening about the Medicaid and Medicare situation. His wife asked him, "Why don't you stop complaining and do something about it?" He did! And he started speaking to local groups, sharing the physician's viewpoint and asking them to communicate with their Congressman and express their views.

Educating the public about medicine and its problems is one civic responsibility that physicians tend to overlook. It can be done and it can be enjoyable. The time may be now to break out of the doldrums and spend a little time sharing the ever-changing world of medicine with others.



Bioequivalence



Poison ivy and other severe allergic states intractable to adequate trials of conventional treatment will often respond to a short, intensive, adjunctive course of Medrol. Medrol Dosepak is designed to provide a tapered, six-day course of methylprednisolone tablets.

On occasion, a six-day course of Medrol therapy may not be sufficient and therapy may need to be extended. If there is continued contact with the sensitizing agent, corticosteroids will not completely suppress the inflammatory response. A further caution: If lesions become infected during Medrol therapy, it should be remembered that steroids may decrease resistance to infection and hinder the body's ability to localize an infection.

MEOROL COMPRESSED TABLETS—2, 4 & 16 MG
(METHYLPREONISOLONE TABLETS, N.F., UPJOHN)

OESCRIPTION AND ACTIONS: Medrol (methylprednisolone) is a synthetic glucocorticoid with potent anti-inflammatory effects It is readily absorbed from the GI tract Glucocorticoids cause profound and varied metabolic effects and modify the body's immune responses to diverse stimuli.

INDICATIONS: 1. **Endocrine Disorders:** Primary or secondary adrenocortical insufficiency (hydrocortisone or cortisone is the first choice; synthetic analogs may be used in conjunction with mineralocorticoids where applicable, in infancy, mineralocorticoid supplementation is of particular importance). Congenital adrenal hyperplasia; nonsuppurative thyroiditis; hypercalcemia associated with cancer. 2. **Rheumatic Disorders:** As adjunctive therapy for short-term administration (to tide the patient over an acute episode or exacerbation) in: psoriatic arthritis; rheumatoid arthritis (selected cases may require low-dose maintenance therapy); ankylosing spondylitis, acute and subacute bursitis; acute nonspecific tenosynovitis; acute gouty arthritis 3. **Collagen Diseases:** During an exacerbation or as maintenance therapy in selected cases of—Systemic lupus erythematosus; acute rheumatic carditis 4. **Oermatologic Oiseases:** Pemphigus; bullous dermatitis herpetiformis, severe erythema multiforme (Stevens-Johnson syndrome); exfoliative dermatitis, mycosis fungoides; severe psoriasis 5. **Allergic States:** Control of severe or incapacitating allergic conditions intractable to adequate trials of conventional treatment Seasonal or perennial allergic rhinitis; bronchial asthma, contact dermatitis, atopic dermatitis; serum sickness. 6. **Ophthalmic Oiseases:** Severe acute and chronic allergic and inflammatory processes involving the eye and its adnexa such as—allergic corneal marginal ulcers, herpes zoster ophthalmicus; anterior segment inflammation; diffuse posterior uveitis and choroiditis; sympathetic ophthalmia; allergic conjunctivitis; keratitis; chorioretinitis; optic neuritis; iritis and iridocyclitis. 7. **Respiratory Oiseases:** Symptomatic sarcoidosis; Loeffler's syndrome not manageable by other means; berylliosis; fulminating or disseminated pulmonary tuberculosis when concurrently accompanied by appropriate antituberculous chemotherapy 8. **Hematologic Oisorders:** Idiopathic and secondary thrombocytopenia in adults; acquired (autoimmune) hemolytic anemia; erythroblastopenia (RBC anemia), congenital (erythroid) hyperplastic anemia 9. **Neoplastic Diseases:** For palliative management of: leukemias and lymphomas in adults, acute leukemia of childhood 10. **Edematous States:** To induce a diuresis or remission of proteinuria in the nephrotic syndrome, without uremia, of the idiopathic type or that due to lupus erythematosus 11. **Miscellaneous:** Tuberculous meningitis with subarachnoid block or impending block when concurrently accompanied by appropriate antituberculous chemotherapy Systemic dermatomyositis (polymyositis)

CONTRAINOICATIONS: Systemic fungal infections.

WARNINGS: In patients on corticosteroid therapy subjected to unusual stress, increased dosage of rapidly acting corticosteroids before, during, and after the stressful situation is indicated

Corticosteroids may mask some signs of infection and new infections may appear during their use. There may also be decreased resistance and inability to localize infection. Prolonged use may enhance the establishment of secondary ocular infections due to fungi or viruses.

Since adequate human reproductive studies have not been done, the use in pregnancy, nursing mothers or women of childbearing potential requires that the possible benefits be weighed against the potential hazards to the mother and the embryo or fetus. Infants should be observed for signs of hypoadrenalism.

Average and large doses of hydrocortisone or cortisone can cause elevation of blood pressure, salt and water retention, and increased excretion of potassium. These effects are less likely to occur with the synthetic derivatives except when used in large doses. Dietary salt restriction and potassium supplementation may be necessary All corticosteroids increase calcium excretion.

While on corticosteroid therapy, patients should not be vaccinated against smallpox. Other immunization procedures should not be undertaken in patients who are on corticosteroids, especially on high dose, because of possible hazards of neurological complications and a lack of antibody response.

The use of corticosteroids in active tuberculosis should be restricted to those cases of fulminating or disseminated tuberculosis in which the corticosteroid is used for the management of the disease in conjunction with an appropriate antituberculous regimen.

If corticosteroids are indicated in patients with latent tuberculosis or tuberculin reactivity, close observation is necessary as reactivation of the disease may occur. During prolonged corticosteroid therapy, these patients should receive chemoprophylaxis.

PRECAUTIONS: Hormone therapy is an adjunct to, and not a replacement for, conventional therapy

Dosage should be individualized according to the severity of the disease and the response of the patient As soon as a satisfactory clinical response is obtained, the daily dose should be reduced, either to termination of treatment or to the minimal effective maintenance dose level. The lowest possible dose should be used and when reduction in dosage is possible, the reduction should be gradual if the drug has been administered for more than a few days If a period of spontaneous remission occurs in a chronic condition, treatment should be discontinued.

Drug-induced secondary adrenocortical insufficiency may be minimized by gradual reduction of dosage. This type of relative insufficiency may persist for months after discontinuation of therapy; therefore, in any situation of stress occurring during that period, hormone therapy should be reinstituted Since mineralocorticoid secretion may be impaired, salt and/or a mineralocorticoid should be administered concurrently

There is an enhanced effect of corticosteroids on patients with hypothyroidism and in those with cirrhosis

Corticosteroids should be used cautiously in patients with ocular herpes simplex because of possible corneal perforation

Psychic derangements may appear or existing emotional instability or psychotic tendencies may be aggravated by corticosteroids.

Aspirin should be used cautiously in conjunction with corticosteroids in hypoprothrombinemia .

Steroids should be used with caution in nonspecific ulcerative colitis, if there is a probability of impending perforation, abscess or other pyogenic infection, diverticulitis, fresh intestinal anastomoses, active or latent peptic ulcer, renal insufficiency, hypertension; osteoporosis, and myasthenia gravis.

Growth and development of infants and children on prolonged corticosteroid therapy should be carefully observed.

Blood pressure, body weight, routine laboratory studies, including 2-hour postprandial blood glucose and serum potassium, and a chest X-ray should be obtained at regular intervals during prolonged therapy Upper GI X-rays are desirable in patients with known or suspected peptic ulcer disease

ADVERSE REACTIONS: Fluid and Electrolyte Oisturbances. Sodium retention, fluid retention; congestive heart failure in susceptible patients, potassium loss, hypokalemic alkalosis; hypertension **Musculoskeletal.** Muscle weakness, steroid myopathy, loss of muscle mass, osteoporosis; vertebral compression fractures, aseptic necrosis of femoral and humeral heads; pathologic fracture of long bones **Gastrointestinal.** Peptic ulcer with possible perforation and hemorrhage; pancreatitis; abdominal distention, ulcerative esophagitis **Dermatologic.** Impaired wound healing, thin fragile skin, petechiae and ecchymoses, facial erythema, increased sweating May suppress reactions to skin tests **Neurological.** Increased intracranial pressure with papilledema (pseudotumor cerebri) usually after treatment Convulsions, vertigo, headache **Endocrine.** Development of Cushingoid state, suppression of growth in children, secondary adrenocortical and pituitary unresponsiveness, particularly in times of stress, as in trauma, surgery or illness, menstrual irregularities, decreased carbohydrate tolerance; manifestations of latent diabetes mellitus, increased requirements for insulin or oral hypoglycemic agents in diabetics **Ophthalmic.** Posterior subcapsular cataracts; increased intraocular pressure, glaucoma, exophthalmos **Metabolic.** Negative nitrogen balance due to protein catabolism

OOSAGE ANO AOMINISTRATION: The initial dosage may vary from 4 to 48 mg per day **Requirements are variable and must be individualized on the basis of the disease under treatment and the response of the patient.** The proper maintenance dosage should be determined by decreasing the initial dosage in small decrements at appropriate time intervals until the lowest dosage which will maintain an adequate clinical response is reached If after long-term therapy the drug is to be stopped, it is recommended that it be withdrawn gradually rather than abruptly

ALTERNATE-DAY THERAPY (ADT): ADT is a corticosteroid dosing regimen in which twice the usual daily dose of corticoid is administered every other morning The purpose of this mode of therapy is to provide the patient requiring long-term pharmacologic dose treatment with the beneficial effects of corticoids while minimizing certain undesirable effects including pituitary-adrenal suppression, the Cushingoid state, corticoid withdrawal symptoms, and growth suppression in children

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MALPRACTICE: Causes and Effects



by W. F. Owens, Jr., M.D.,
Orthopedic Surgeon, Lloyd Noland Hospital,
Fairfield, Alabama

We have on our hands an enormous problem in the form of medical malpractice. This has gradually developed over a period of years, it has steadily increased in magnitude and has now reached truly crisis levels in many cities and states of our country.

In addition to the gravity and extent of the problem, it is of such a complex nature, none of those really knowledgeable in the area feel there is a good solution and they agree only that major changes must be made.

In order to better understand the problem, let us go back to the thirties and forties and then come forward with mention of some of the developments pertinent to the crisis. At that time, before and during World War II, medical practice was an entirely different thing, and relatively few people in the country had access to really good medical care. This was due to a number of things, but most important were the lack of scientific developments in technique, drugs and devices; the relative lack of hospitals, especially outside the cities; the lack of money and medical insurance to obtain care and the dependence upon proprietary and home remedies.

During and following World War II, the American public became acquainted with a much improved and more sophisticated standard of medical practice. Progressive changes have continued to the present time when most people have medical insurance or other means to pay for quality care; there are plenty of hospitals, we have specialists to care for practically every probelm; wonder drugs, pacemakers, computers, self activating artificial limbs, artifical joints, organ transplants of almost all kinds and can even change our body shapes by the injection of plastic materials into various sundry locations.

This increased availability of much-improved care to a nation of over 200 million people, financially able to have the care, has dramatically increased the number of people who receive some form of medical attention every day.

Today's patient not only is aware of the availability of modern methods and facilities, but is remarkably enlightened in the field of medicine. He wishes to understand his problem, to have explained the whys and wherefores of his examinations and treatment and commonly indicates his wish for consultation or a second opinion, or even a third opinion.

And we have become a litigious people. I am not just being critical or having reference to suing doctors. What happens every time there is a "Fender Bender"? It is no longer a joke that the victim goes first to his lawyer and then to his doctor; it is common place. It seems anytime there is an injury the victim immediately surveys the situation to see if there is a liable party, and there is usually: The employer, the store owner where one had a fall, the public conveyance on which one tripped, or the premises of a neighbor where a child falls at play. We are indeed a society of people with an eye for the windfall. And there is none more attractive than the tax-exempt award made by the court.

Almost as if to complement the situation, there have been developments in our laws concerning medical malpractice such as to strongly encourage litigation in this field.

There are laws in each of our states called statutes of limitations. These laws state how long we can wait after the occurence of an event before filing a law suit pertaining to the event. Now it stands to reason, if one has been wronged and he is inclined to seek recourse through our laws and courts, he should do so in a reasonable period of time.

Statutes of limitations differ from state to state and are different for varying types of suits. In civil suits for personal injury they are usually for one or two years, and such a suit filed later than this would be barred by the statute. But not so in medical malpractice, where there are two rather remarkable and important exceptions.

In the first, the statute of limitations does not begin to run in the case of a minor until he reaches majority. That is, if there is some evident reason for a medical malpractice suit on behalf of an infant, the suit may be filed more than 20 years later. And if any among you is saying "ridiculous, couldn't happen," then you must have missed the just recently syndicated report of a New York case. In this case, a woman filed suit for damage to her eyes associated with the use of oxygen in her incubator. She waited over 20 years to file suit and at the time of her alleged injury, the treatment she received was not only common place, but was considered first rate, and the condition she suffered was not then generally recognized. She was awarded $900,000.00 by the jury, who evidently felt her doctor was liable for a result not then commonly understood or appreciated.

The other notable exception was brought about by what is referred to as the "Discovery Rule". And in this rule, the law holds that the statute of limitations does not begin to run until the injured discovers he has been wronged. The classic example for this is the all-too-frequent "foreign-body case", or the case where an instrument, like a pair of scissors, is left in the patient by mistake, and mind you, I am not even suggesting such an unfortunate patient should not receive compensation for such an error. But the

ramifications and possibilities of the rule are almost endless and it practically removes the statute of limitations as a barrier to medical malpractice litigation.

Another doctrine of law with particular application to medical malpractice is called "res ipsa loquitor," indicating the "thing speaks for itself." Here the law states that in some situations, injuries occur when the patient is helpless, such as in an operating room, under anesthesia, and those responsible for the patients care must be liable. The law further states in such a situation that the jury is capable of knowing such an injury is due to negligence and there is no need for expert testimony to account for or to explain the event. The rule seems to ignore the fact that patients are commonly seriously ill or extensively injured, have miltiple problems, are poor risks for the needed procedure and that any one or more of innumerable possible unexpected or unexplained results may occur, without negligence on anyone's part.

The "doctrine of informed consent" has created absolute turmoil with attorneys attempting to defend physicians and hospitals and it deserves comment here. You know, in the common law, one of the more common tort actions was that of assault and battery. And the most common valid defense was that of consent. Or, in other words, one could not complain over being injured if he had in some way consented to such an injury. And traditionally when a patient enters a hospital or prepares to undergo an operation, he signs a form giving consent for the examination, treatment or operation.

The courts have added considerably to this in recent years and have indicated a general type consent form without more specific explanation to the patient is inadequate. This lack of full disclosure is considered negligence by the treating physician, and the courts have placed the burden on the physician to explain the nature of the condition being treated, when the nature of the treatment being considered is known, alternative methods of management, the risks of each and what may be expected subsequent to the treatment.

The compliance with the spirit of this rule on the part of a doctor must be generally agreed as being ideal-type medical practice, representative of the best in rapport and communication and of the highest-type patient physician relationship. Surely, any medical practitioner would be desirous of this situation. On the other hand, how does a physician fully acquaint an average patient with an unusual disorder, prepare him fully for a complicated operation, give an unbiased description of alternative methods and adequately prepare him for all aspects of convalesence and post operative care including the many possible complications? I tell you, there is no way; it is impossible.

And the doctrine is creating problems for the courts. When suit is filed under this doctrine, the invariable thesis of the plantiff, no matter what discussion took place before treatment, is that they were not given an explanation or they did not understand it. And in fact, there is good evidence that very little of what is told a patient under the stress of pre-operative emotion is understood, properly considered, or remembered.

The psychiatrists are now seeing with increasing frequency the patient who has developed an actual anxiety neurosis over what he was told by his physician in an effort to give adequate information for an informed consent. And further, law suits have been filed against physicians for damages associated with the anxiety created by such disclosure. I anxiously await the response of the jury to this novel situation!

These are some of the factors causative of the present climate so favorable to medical malpractice litagation, but what has caused the crisis? What has suddenly made the pot boil; caused doctors to give up practice, to move to other areas, to join the armed forces and even to go on strike? The answer here is the same as for so many other problems today, namely, money.

Malpractice insurance is so costly, few carriers remain in the business and those who do so are charging premiums the medical profession cannot manage. In the State of New York, Class V Physicians (Neurosurgeons, Orthopaedists) are now paying $42,000.00/year and those rated as poor risks expect premiums up to $60,000.00 per year. California, Michigan, New Jersey and Texas are in almost equally difficult situations and our sister states of Florida and Tennessee are so expensive a young beginning physician requires financial aid of some sort to meet his insurance premium before he can see his first patient.

The insurance industry explains the rising costs have been so extreme they cannot afford coverage for less. Multi-million dollar awards are no longer uncommon. California now averages a million dollar award per month for medical malpractice. And the costs of investigation and preparation of the cases appear to be about the most expensive of all litigation. I am told by an authority in the insurance industry that a common situation is to spend $80,000.00 over a two-three year period in preparation of a case, have it heard, appealed and then remanded for new trial. This sequence of events could double the costs to the carrier and still end in an enormous award to the plantiff.

"...Costs of investigation and preparation of cases appear to be about the most expensive of all litigation..."

In a recent study, only half of claims were made during the policy period and five per cent of claims were made over four years after the policy period. This is attributed to the strange rules regarding statute of limitations.

I have not said much up to this point about the role of the attorney in this situation. And I want to preface these remarks by saying I have good friends in the legal community. Some are plaintiff attorneys, and I sincerely hope and trust medical malpractice will never become in Jefferson County, Alabama what it has in so many other areas. This field is so lucrative for the attorney it becomes absolutely irresistible once the movement gathers steam in a locality. I would sincerely hate to see some of my friends inticed into involvement.

There is now a national organization of medical malpractice plaintiffs attorneys called "the million dollar club." The sole requirement for membership is to successfully sue a doctor for a million dollars. The club is growing rapidly. In the city of Chicago, within a block of a major university

MALPRACTICE: Causes and Effects

law school there is an attorney who grosses $5 million per year from medical malpractice. One of the main complaints of this group of barristers is they have so many cases to file and prepare they do not have time to adequately work-up the case and acquire its fullest value.

It is indeed, a tribute to the legal profession, that more are not involved in such an attractive phase of practice.

Now, what can we do to solve the problem? I am quite convinced at this point there is no good solution to the problem. It is too big, too complex and there is too much opposition to a solution. So what do we do? The answer here, I think, is to approach the problem in multiple ways.

It is my candid opinion that we need a program of education for the practicing physician. He must know about the problem of malpractice and how best to cope with it in his practice. We need requirements for remaining current in the development in medicine so as to avoid educational absolescence and we must take actions to limit or otherwise control the practice of those who do not remain current or for other reasons are not capable of practicing good medicine.

Our legislature must make equitable the doctrines of law, rules of evidence and the statute of limitations regarding medical malpractice. In addition, a ceiling should be placed on the amount of awards, and the award should go to the injured. For an injured plantiff to receive less than 20 cents of the dollar points up the need of premium change of our present system.

In addition, these awards need to be made in periodic payments via some type of trust where the award is intended to provide on-going medical care or maintenance for the disabled. There should also be given proper credit to other sources of income, such as insurance proceeds, and the amount of the award lessened accordingly.

And further, our legislature needs to give us a system of arbitration for these causes so as to eliminate the frivolous or non-meritorious claim on the one hand, and on the other, to assure proper settlement of the justified claim.

Already in Jefferson County, some of our insurance carriers are refusing to renew coverage as the annual contract expires, and others are increasing premiums. This is not surprising in view of the national scene. I do hope we can prevent a meteoric rise in our State.

I could not afford a premium as is being presently paid in several other states and none of us wishes to see our medical insurance rates and taxes increase as will be inevitable to cover the astronomical insurance premiums.

Thus, this is no longer the problem of the doctor and his profession – this is a major problem for our society; for our country. And improvement of the situation will require a joint effort of the government, consumer, the legal profession, the insurance industry and the medical profession.

I do hope that the physicians in Alabama never go on strike; that they never have to pass on to "the consumer" a $42,000.00 per year insurance premium; that productive and valuable physicians do not have to give up practice because they cannot afford insurance.



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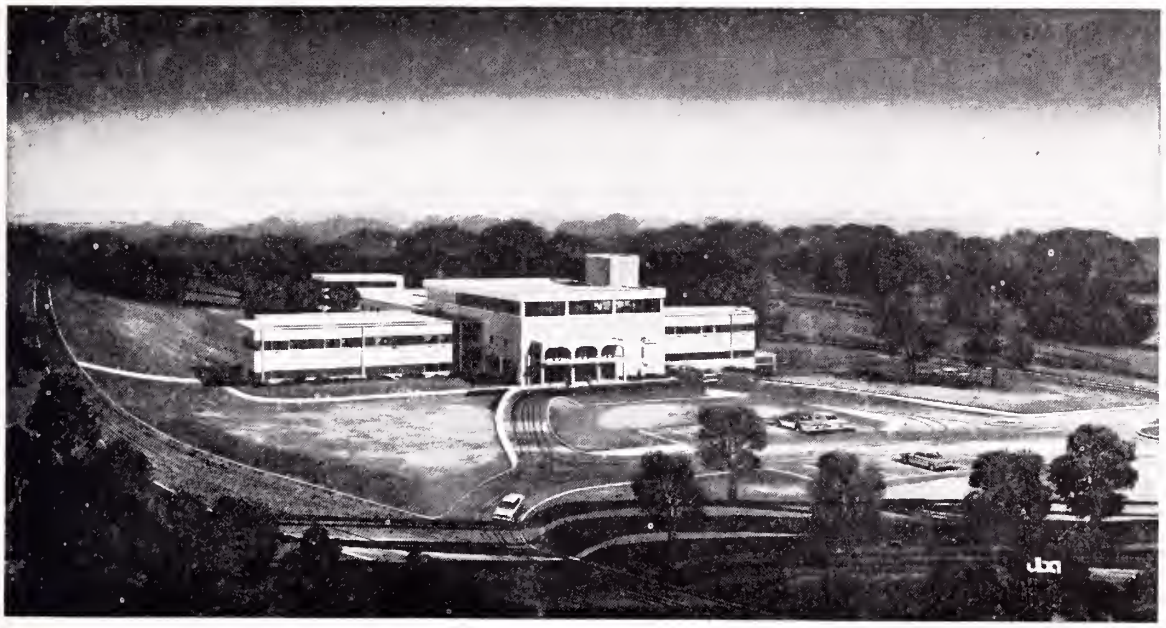
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Volume 45 July 1975 Number 1

Kidney Transplantation In The Pediatric And Adolescent Patient With End Stage Renal Failure

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Joaquin S. Aldrete, M.D., June F. Shaw, M.D., and Jean M. Morgan, M.D.*

INTRODUCTION

Renal transplantation in infants[1,2,7,10], children and adolescents[1,2,5,6,7,9-13] has become increasingly successful during the past eight years resulting in recent emphasis directed toward the development of comprehensive patient care facilities for children with end stage renal failure. Improved dialysis techniques can now provide long term support for infants and children with renal failure awaiting kidney transplantation as well as adequate maintenance of patients in the immediate post transplant course if acute renal failure results from tubular necrosis or acute rejection. The encouraging results of kidney transplantation in patients under the age of 21 regarding survival, maintenance of renal function and overall rehabilitation as opposed to the multiple medical problems associated with long term dialysis encourage the use of renal allografts to be the primary mode of therapy in patients less than the age of 21.

The following paper reviews the experience in renal transplantation at The University of Alabama Medical Center in patients under the age of 20. Specific attention has been directed toward patient survival, functioning transplants, histocompatibility, complications and mortality.

CLINICAL MATERIALS

Seventeen patients (ages 8 to 19) received renal allografts at The University of Alabama Medical Center between 1969 and 1974 (See Table I). There were eight males and nine females. Ten patients developed renal failure secondary to chronic glomerulonephritis, three patients had chronic pyelonephritis and two polycystic renal disease. One individual had congenital renal hypoplasia and another sustained trauma to a solitary kidney requiring nephrectomy. Fourteen patients received kidneys from their parents, two obtained kidneys from siblings and one from a cadaver. Serologic tissue typing performed prospectively in all patients revealed one A Match, two with a B Match and the remaining 14 patients to have C or D-Matched kidneys. Twelve patients required bilateral nephrectomy pretransplantation because of hypertension, chronic urinary tract infection or rapidly progressive glomerulonephritis. Immunosuppressive therapy included azathioprine, prednisone and antithymocyte globulin in all patients but one who received only azathioprine and prednisone according to the program previously described[4].

Anti-rejection treatment included increasing the daily prednisone to 5 mg/kg for two days with gradual reduction to the prerejection level. Radiation therapy, total dose of 600 r to the mid-plane of the kidney, was given in four treatments during a period of eight days. Conversion from daily administration of prednisone to alternate day prednisone therapy was completed in nine patients between four and 12 months post transplantation. One additional patient has not yet been completely converted to every-other-day corticosteroid therapy.

Preparation for transplantation included hemodialysis in all but one patient where surgery was performed in the late stages of renal failure. The allograft was placed within the peritoneal cavity in three children less than 20 kg in weight according to the method of Starzl (See Figure 1) and extraperitoneal in the remaining 14 by the standard technique (See Figure 2). The immediate postoperative patient management program for recipients of related-donor kidneys has been previously described[3].

*Department of Surgery (Drs. Diethelm, Sterling, Aldrete and Morgan) and Department of Clinical Pathology (Dr. Shaw), University of Alabama Medical Center and VA Hospital, Birmingham.

RESULTS

Survival—Fourteen of 17 patients are alive with functioning kidneys nine to 52 months post transplantation (average 23 months). Renal function was stable in 12 of these individuals and two have impaired function because of chronic allograft rejection. Three patients have significant proteinuria (more than 2 gm/24 hours) and one with moderate proteinuria (1 gm/24 hours). Three patients have a serum creatinine greater than 1.5 mg/100 ml, and the remaining 11 maintain a serum valve between 0.8 and 1.4 mg/100 ml. Rejection crises, reversible with prednisone and radiation therapy, occurred in all but five patients with an average of one per patient.

Mortality—Three of 17 patients died from infection at 44 months, 19 months and 18 months post transplantation. Gram negative organisms were the cause of death in two patients both with chronic rejection and declining renal function. The third patient developed pneumocystis and expired from pulmonary insufficiency with normal renal function. Permission for autopsy examination was granted in all three instances.

Complications—Nine patients developed postoperative complications including ureteral necrosis, intestinal obstruction, intra-abdominal abscess, aseptic necrosis and pneumococcal pneumonia. Complications contributing to death included gram negative septicemia and pneumocystis pneumonia. Those patients immunologically stable with normal and renal function can withstand elective and emergency surgery without apparent adverse effect upon renal function. In no instance has a surgical procedure been associated with a rejection episode.

Alternate day prednisone therapy in nine patients has been of considerable value in decreasing the side effects of prednisone. Obesity was markedly reduced within six months of complete conversion. Hypertension, commonly noted on daily steroid therapy, was corrected in all but one patient who still requires antihypertensive medication (See Figure 3). One patient developed signs and symptoms of hypoadrenalism during conversion which resolved after temporarily increasing the dosage. At a later date, complete conversion was successfully achieved. Acute allograft rejection progressing to chronic rejection occurred in two patients 18 and 24 months post transplantation during conversion to alternate day therapy. Renal function became

TABLE 1—RENAL TRANSPLANTATION IN THE PEDIATRIC AND ADOLESCENT PATIENT

									IMMUNO SUPPRESSION			RENAL FUNCTION			
NO	SEX	AGE	DISEASE	DONOR	TISSUE TYPING	NEPHRECTOMY	SURVIVAL (MONTHS)	REJECTION CRISES	ATG	PRED	AZA	BUN	CR	PROTEINURIA	CRCL
1	M	16	TR	S	D	YES	46	2	NO			D E A D			
2	F	14	CPN	P	D	YES	18	1	YES			D E A D			
3	M	11	CONG	P	C	NO	52	2	YES	12.5/0*	100	17	0.8	-	44
4	F	19	CGN	P	C	YES	19	0	YES			D E A D			
5	M	14	CGN	P	B	YES	41	3	YES	25/0*	125	21	0.9	-	57
6	F	17	CGN	P	D	YES	35	2	YES	27.5	125	48	1.7	4+	35
7	M	16	POLY	P	C	YES	26	0	YES	20/0*	150	28	1.4	-	47
8	M	19	CGN	P	C	YES	24	0	YES	15	100	17	1.0	-	118
9	M	12	CGN	P	D	NO	24	0	YES	27.5/0*	75	16	0.9	-	38
10	F	9	CGN	P	B	YES	22	1	YES	30/0*	50	13	1.0	1+	64
11	M	19	CGN	P	D	NO	20	1	YES	22.5	100	49	2.3	4+	47
12	M	19	POLY	S	A	YES	18	0	YES	10/0*	100	17	1.1	-	63
13	F	11	CGN	CD	D	NO	12	3	YES	12.5	100	48	4.7	4+	24
14	F	12	CGN	P	C	YES	12	1	YES	22.5/0*	100	18	1.4	-	39
15	F	8	CPN	P	D	YES	10	1	YES	15/0*	50	23	1.1	-	32
16	F	17	CPN	P	C	YES	9	1	YES	42.5/0*	100	14	0.9	-	50
17	F	14	CGN	P	C	NO	9	1	YES	42.5/7.5*	100/75	18	0.9	2+	86

*Alternate Day Therapy

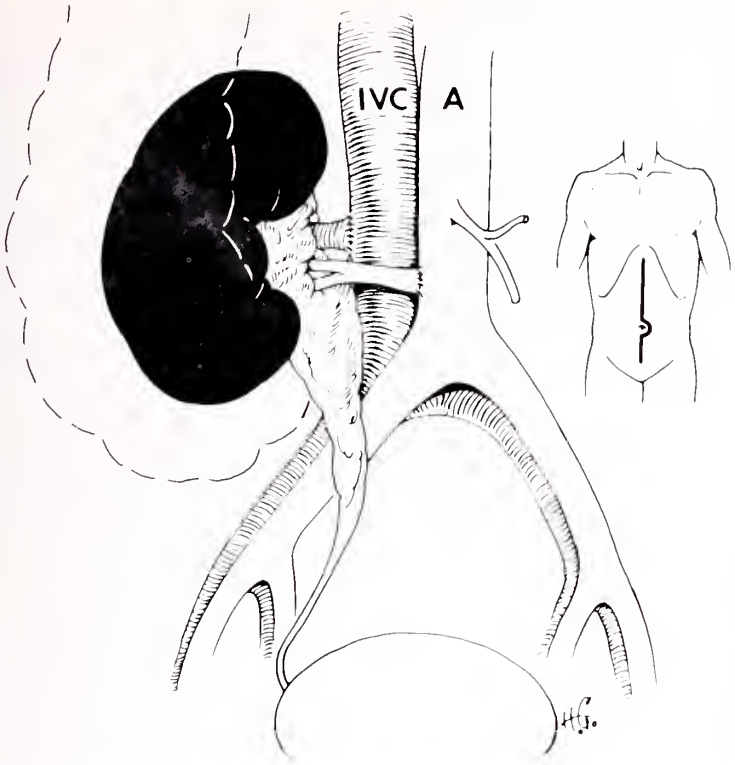


FIGURE 1
The intra-abdominal placement of transplanted kidneys are utilized in children less than 20 kg of weight with end to side vascular anastomoses to the vena cava and aorta.

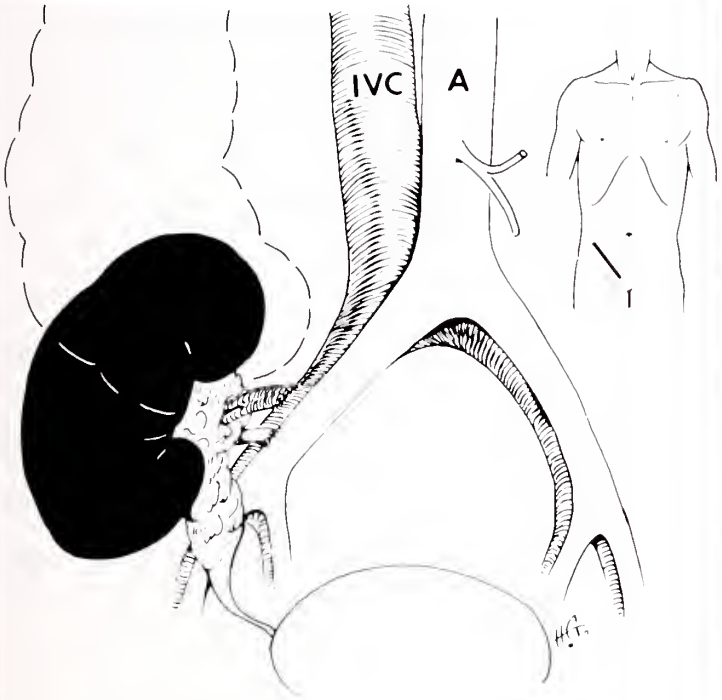


FIGURE 2
The extraperitoneal approach was utilized in children greater than 20 kg of weight similar to the adult technique except that the arterial anastomosis was performed end to side to the common iliac artery.

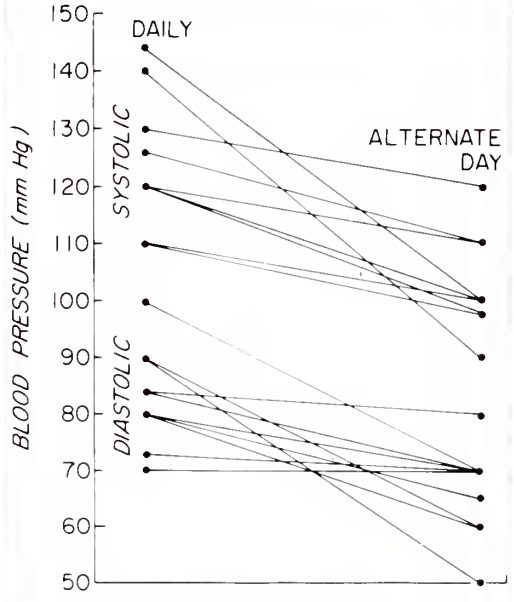


FIGURE 3—Following conversion of daily to alternate day corticosteroid therapy, both systolic and diastolic blood pressures were decreased, and only one patient continued to require antihypertensive medication.



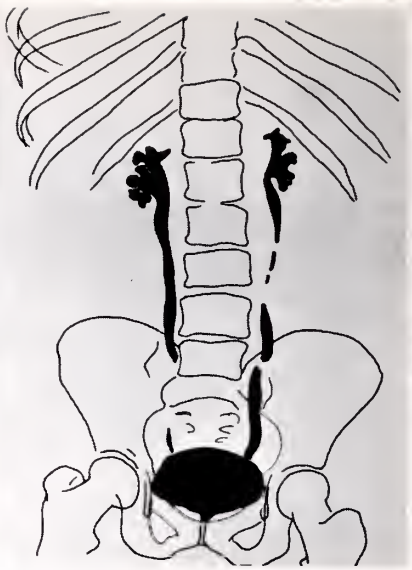


FIGURE 4
A cystogram performed on a 14-year-old girl with end stage renal failure and chronic urinary tract infection with enuresis confirmed the diagnosis of bilateral ureteral reflux. A bilateral nephroureterectomy was performed before transplantation.

stable in one individual after restoration of daily prednisone therapy to a higher level than that administered prerejection. The second patient developed chronic rejection with declining function. Alternate day prednisone therapy has provided little beneficial effect in retarding the progression of steroidinduced cataracts, diabetes or aseptic necrosis.

Growth in this series of patients has been unpredictable. Patients over the age of 14 with a relatively short duration of renal failure often have a nearly normal growth pattern before transplantation and resumed normal growth post transplantation. However, those patients with long-standing renal failure usually have marked retardation of growth pretransplantation and have failed to demonstrate significant growth afterwards. Alternate day prednisone has not improved the rate of growth in these patients.

DISCUSSION

Renal transplantation in pediatric patients has been reported in infants as young as two and four months of age[10] althought the majority of children receiving allografts are greater than the age of six. Patient and kidney survival are at least equal to that observed in the adult population with children appearing to tolerate postoperative complications more readily than those in the older age group.

In some instances, bilateral nephrectomy may be combined with the transplant procedure in one stage; however, if hypertension is severe or if urinary tract infection is present, then our practice has been to perform two separate operations. The allograft is placed within the peritoneal cavity in children 20 kg or less as described by Starzl[13] using the vena cava and aorta or common iliac artery for arterial anastomosis. The right colon, mobilized and reflected medially, is then replaced anterior to the transplanted kidney suturing the tinea of the cecum and ascending colon to the lateral peritoneum preventing a cecal volvulus. The ureter is placed retroperitoneally to the entrance of the bladder.

In larger children, the kidney is placed in the extraperitoneal space using the external iliac vein and common iliac artery for end-to-side vascular anastomoses. A ureteroneocystostomy was utilized in all patients as a means of urologic reconstruction. Certain technical problems arising during the intraoperative period can be avoided if special care is given to the continual monitoring of the arterial and right atrial pressures during and after bilateral nephrectomy and transplantation. This information will prevent the development of hypotension secondary to hypovolemia.

It is particularly important to maintain normal arterial and right atrial pressures during the vascular anastomosis and after release of the aortic, common iliac and vena caval clamps, but before restoration of renal blood flow to the kidney. The latter is accomplished after several minutes have elapsed and a stable hemodynamic situation is assured. Additional infusion of plasma, crystalloid or packed red cells may be necessary at this time since an adult kidney in a small child may create a significant shunt of aortic blood flow thus decreasing the cardiac output.

A reduction in cardiac output causing a decrease in renal blood flow can result in cortical ischemia and acute tubular necrosis. Osmotic diuretics are of value in establishing a brisk large volume diuresis in the immediate post transplant course restoring the serum creatinine in all but one patient to less than 1.5 mg/100 ml by the evening of the third postoperative day[3]. This manuever enhances the early diagnosis of rejection in the immediate post transplant course by recognizing subtle changes in serum creatinine levels.

Results of renal allograft and patient survival in this small series cannot be correlated with the primary kidney disease. Rapidly progressive glomerulonephritis, present in one patient, was not associated with antiglomerular basement membrane antibodies in the serum pre or post nephrectomy. This patient developed proteinuria associated with a gradual increase in serum creatinine and BUN 25 months post transplantation. A renal biopsy 30 months post transplantation could not distinguish recurrent glomerulonephritis from chronic rejection. Bilateral ureteral reflux and chronic pyelonephritis were present pretransplantation in two patients as was polycystic kidney disease.

The importance of careful urologic evaluation in all children cannot be overemphasized if congenital disorders of the lower urinary tract are to be recognized and

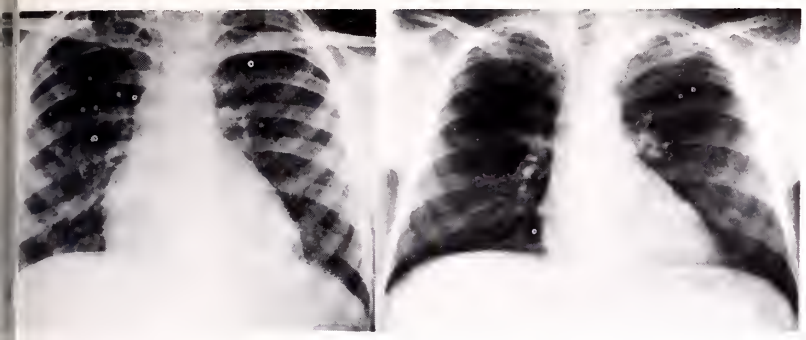


FIGURE 5
A 9-year-old child presented with chronic glomerulonephritis and severe renin dependent hypertension. Bilateral nephrectomy corrected the elevated blood pressure, and the patient remained normotensive post transplantation. The enlarged left ventricle shown at the left before nephrectomy returned to near normal size six months post transplantation as demonstrated by the cardiac silhouette on the right.

corrected before transplantation[12]. A voiding cystourethrogram will identify ureteral reflux necessitating bilateral nephroureterectomy (See Figure 4). Renin-dependent hypertension, occasionally severe, has always been corrected after nephrectomy with gradual reduction in left ventricular enlargement occurring during the first six post transplant months (See Figure 5).

The use of alternate day prednisone therapy advocated to diminish the side effects of corticosteroid therapy has been reported to be especially beneficial in children[9]. The results of this method of steroid administration in ten patients in this series are encouraging in that all patients demonstrated a marked decrease in both systolic and diastolic blood pressures. The typical facies and truncal obesity associated with daily steroid therapy improved remarkably after conversion to every-other-day treatment.. Skeletal growth in our experience has been much less predictable and could not be definitely correlated with alternate day corticosteroid therapy.

Aseptic necrosis, a complication present in 15 to 18 per cent of adult patients undergoing renal transplantation in our experience, occurred in one instance where bilateral Austin-Moore prosthetic replacement was necessary. Reduction in total daily corticosteroid dosage and later conversion to alternate day therapy did not alter this complication.

Rehabilitation overall has been excellent in this series of patients and in that of others reported previously[2,5,8,10,12]. Most patients return to school within three to six months and all have demonstrated substantial improvement in scholastic performance. Constant encouragement by the entire professional staff has been of great benefit to both the children and their families during the transition period from dialysis to recovery after renal transplantation. Responsibility for the taking of immunosuppressive therapy has been assumed by all patients over the age of 12 with excellent cooperation. Parental guidance is utilized in children less than 12 in the daily administration of medication.

SUMMARY

Renal transplantation performed in 17 patients less than the age of 20 provided a functioning kidney in every instance for an average graft survival of 23 months. Fourteen patients are alive, 11 of whom have a serum creatinine less than 1.5 mg/100 ml. Three patients with functioning kidneys succumbed to infection at 44, 19 and 18 months post transplantation. Alternate day prednisone therapy utilized in nine patients was beneficial in reducing blood pressure to normal and correcting the typical facial appearance and body habitus of the patient receiving corticosteroids. Complications post transplantation were no more frequent in children and appear to be better tolerated than in the adult transplant recipient. Renal transplantation continues to be the most effective method of treating chronic renal failure in children and adolescents.

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CONTRAINDICATIONS: Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components.

WARNING: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended.

PRECAUTIONS: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs.

ADVERSE REACTIONS: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.

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Digest of Actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the June 10-11 meeting of the State Board of Censors:

1. Approved Financial Statement for period ending May 31, 1975, which shows receipts in the amount of $25,004.33 and disbursements in the amount of $102,707.04.
2. Received as information request from Pennsylvania Medical Society for donations to restore the home of Benjamin Rush, M.D., and recommended that an article be published in the *Alabama MD* for physicians who would like to donate to this cause.
3. Approved use of abbreviated expense vouchers for in-state travel.
4. Approved request from ALAPAC for second allotment of $2,500 from the previously allocated $7,500.
5. Approved plan submitted by Dr. Kenneth M. Hannon, Mobile, for the systematic care of spinal cord injured patients in South Alabama and commended those physicians responsible for its development.
6. Received as information AMA's Assessment Up-Date Report showing that 72.58% of Alabama members have paid their $60 assessment.
7. Recommended that MASA's delegation to AMA Annual Convention withdraw resolution number 17 relating to accredited programs of CME sponsoring organizations.
8. Received as information the expressed support of the Alabama Dental Association to the Patients' Compensation Act.
9. Reaffirmed position of opposition of repeal of the anti-substitution law following receipt of letter from the Alabama Pharmaceutical Association stating continued commitment to support repeal of the law.
10. Recommended that MASA reaffirm its opposition to the chiropractic insurance bill.
11. Received as information a letter from House Speaker Joe McCorquodale expressing appreciation for Mr. Richard Whitaker's assistance as Reading Clerk for the House of Representatives.
12. Approved adoption of model constitution for county medical societies with the insertion in Section 4, Article VIII regarding responsibility of the county medical society's secretary-treasurer.
13. Approved recommendation by the Liaison Committee to the Medical-Hospital Associations that the Joint Commission on Accreditation of Hospitals' requirement for 48 retrospective audits per year is unreasonable and excessive and that not more than 12 should be conducted.
14. Recommended that HEW be asked to rescind regulations which require certifications and recertification, since these requirements are included in new PSRO guidelines for Medicaid and Medicare.
15. Recommended that Dr. Julian S. Lewis, Mobile, be nominated to succeed Dr. W. Harold Avant, Mobile, for a five-year term to the Board of Health Council on Prevention of Disease and Medical Care.

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CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS. Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms): anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes; exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands, no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults — 600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, 'Rondomycin' (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q.i.d. for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of 'Rondomycin' (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children — 3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
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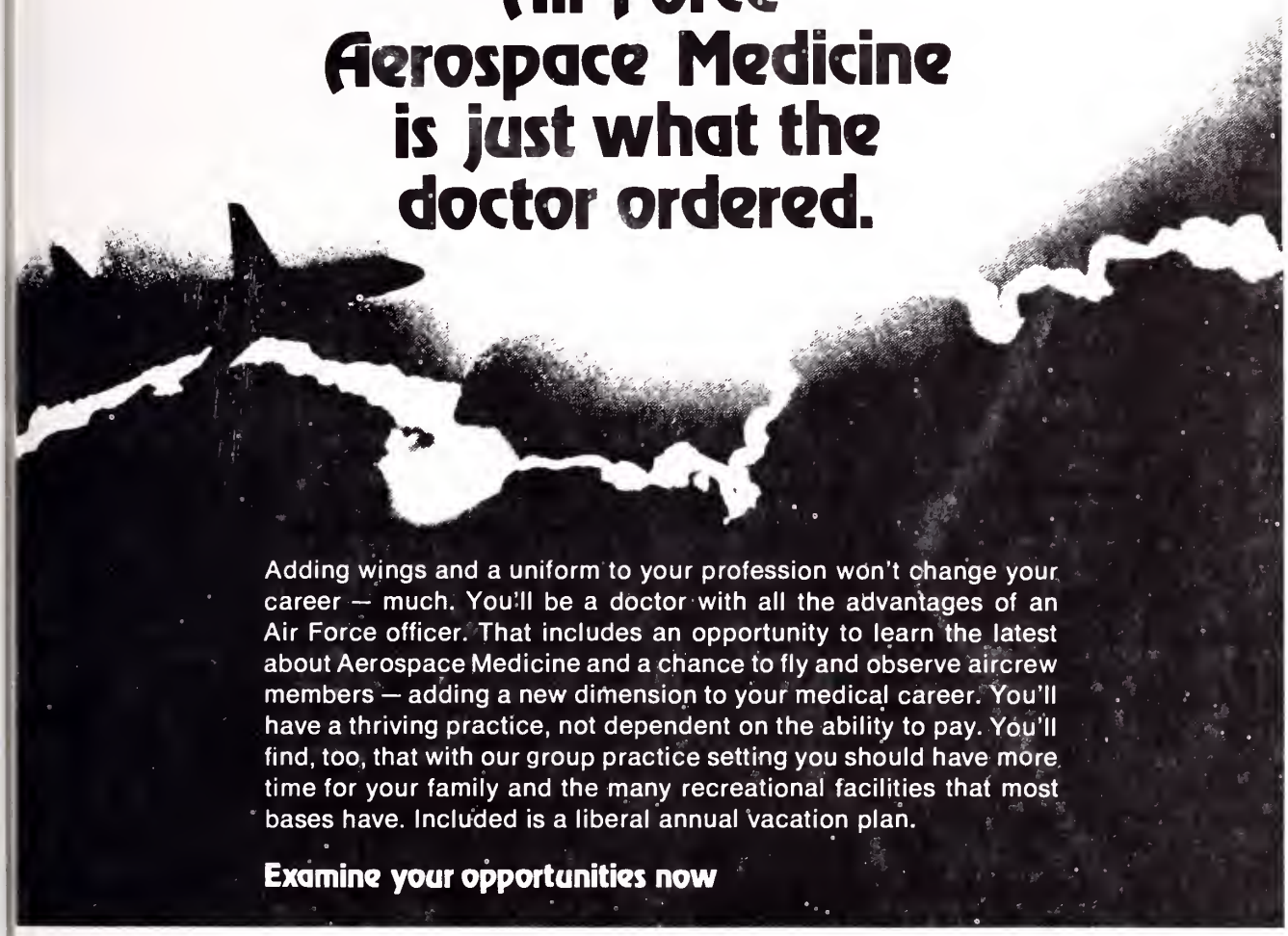
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available. An area for pre-vocational evaluation and training is also present.

Followup may be conducted either on a private basis or through followup clinics at the Rotary Rehabilitation Center. In addition, a Home Health Care Team operating out of the Rotary Center, and sponsored by it, makes home visits to patients in that part of Alabama lying roughly south of Highway 80. Its mission is to visit all spinal cord injured patients that live in that area, filing reports with the appropriate facility regarding the status of the patient. It also recommends specific medical treatment when it appears to be necessary, or may recommend environmental changes at the patient's home.

A MAST (Military Assistance To Safety And Traffic) Program is located at Fort Rucker, near Enterprise. It provides the capability of transporting these patients by helicopter to the acute unit. Its cooperation has been solicited and obtained. In Mobile, a well trained Fire Rescue Service, a section of the Mobile Fire Department, is operating under the direction of a physician.

The Team Approach

The team approach to the care of spinal cord injury has been employed with great success in established systems. The members of the team, both professional and allied health professionals, must be interested in and dedicated to the care of these patients. Obviously, not all orthopaedic surgeons, neurosurgeons or urological surgeons are interested in this particular aspect of medicine, just as all internists are not interested in endocrinology. In Mobile, these three specialists comprise the acute care team, and are involved in the initial care of the patient. The orthopaedist and urologist are involved in his continuing care. The neurosurgeon, after the initial period of hospitalization, remains available for consultation. It has also been found that an anesthesiologist is a valuable member of the team in the early care of these patients. Other disciplines are available for consultation as necessary. The non-physician members of the team include nurses, physical and occupational therapists, respiratory therapists, personnel trained in urological care, social workers and vocational rehabilitation counselors. A liaison nurse (nurse for continuity of patient care) is not present at this time, nor is expert sex counselling available, yet.

Protocol

The Acute Spinal Cord Injury Unit Committee at the Mobile Infirmary has established a protocol for use in the acute setting. Borrowing a term from Dr. John Miller, Spain Rehabilitation Center, Birmingham, two types of patients are recognized – "system" and "non-system".[2] When a physician is contacted by a nurse at the Mobile Infirmary that a spinal cord injured patient has arrived at the hospital, he may admit the patient to the unit. He must designate at the time of initial contact whether he wishes the patient to be a "system" or "non-system" patient. A "system" patient is one who is admitted as such, and who has access to all services available under the protocol without specific order. A "system" patient ordinarily has preferential admission to the Rotary Rehabilitation Center because that institution is part of the system, and will already have become involved in his care while he is in the hospital. "Non-system" patients also have access to all services available, but each service must be ordered by the patient's physician. Dr. Miller has also shown that "system" patients have a significantly lower treatment cost than do "non-system" patients. The protocol at the Mobile Infirmary for "system" patients requires that a neurosurgeon and orthopaedic surgeon be present on each case and make joint decisions as to his treatment. Nothing in the protocol delineates the exact treatment to be used except insofar as steroids are concerned, and this may be modified by the physicians in charge. Physical therapy is involved in the care of the patient within the first 24 hours, and rehabilitation is begun at once. The goal of rehabilitation during the early phase of care is to preserve muscle strength and joint motion. The anesthesiologist and respiratory therapist are also requested to see the patient soon after his admission to the unit. In cervical cord injuries, respiratory insufficiency is the most common cause of early death, especially those above C5. The need for tracheostomy must be recognized quickly. Urological care is instituted immediately upon arrival in the unit. Intermittent catheterization is employed, and appears to offer the patient the greatest protection against urinary tract infection, and the greatest opportunity to become catheter free. The technique of intermittent catheterization is available in great detail elsewhere.[3, 4]

A section of the protocol is devoted to steroid therapy in the acute phase of treatment. Steroids are used to stabilize the lipid membranes and to prevent or reduce edema in the spinal cord. Published documentation that their use has affected the eventual outcome of the neural lesion in human beings is lacking. Recently, clinical evidence that steroids protects the incompletely injured spinal cord against further deterioration has been observed.[5] Ducker has demonstrated that in incomplete lesions dexamethasone (Decadron^{R}) administered early following cord injury effectively reduces or prevents edema, and results in significant neurologic recovery.[6] Methylprednisolone sodium succinate (Solu-Medrol^{R}) has been used in experimental animals with similar results.[7] Because irreversible changes take place in the cord within the first few hours following injury, steroids, if they are to be used, should be administered as early as possible.

Gastrointestinal ulcer prophylaxis should be instituted early in all cervical cord injuries, and in all patients receiving steroid therapy.[8]

Inasmuch as possible, the responsibility for certain aspects of care are delegated to the various allied health professionals involved. As more experience and expertise is gained by these members of the team, delegation of responsibility will become more extensive.

Based on the protocol that has been formulated for the acute unit at the Mobile Infirmary, a suggested protocol for the immediate care of spinal cord injured patients in outlying hospitals has also been formulated by the Acute Spinal Cord Injury Unit Committee. The suggested protocol is reproduced on the following page so that it may be detached and posted in the emergency room if the medical staff of the hospital involved feels that it is desirable to do so.

Continued on Page 28

SUGGESTED PROTOCOL FOR THE IMMEDIATE CARE OF

Spinal Cord Injured Patients

1. Determine whether or not the patient has a neurological deficit. Record brief neurological examination on a record that will be sent with the patient. If the patient does not appear to have sensation or gross movement below the level of injury, observe very carefully for movement of the toes on demand. Even slight motion of the toes indicates an incomplete lesion, and the possibility of rather extensive recovery exists. Check the perianal sensation with a pin. If sensation is present here, this also indicates the possibility of significant recovery. The presence or absence of anal wink or the bulbocavernosus reflex are not prognostic signs for recovery or lack of recovery. Using an indelible pen or pencil, mark the patient's sensory level on the skin anteriorly, noting the date and time on the line. This should be rechecked at least hourly, and a new line drawn and marked as to date and time, as indicated.
2. Avoid further damage to the patient's spinal cord. Be sure he is properly protected and immobilized on a firm bed or board. Protect the injured cervical spine by using sandbags on either side of the patient's head, and apply head halter cervical spine traction of 8-10 pounds in the long axis of the neck.
3. If the patient arrives at the hospital within 4 hours of injury, and there is no contraindication to steroid therapy, give Solu-Medrol^{R} intravenously in a dose of 20.0 - 30.0 mgs. per kg. of body weight. In the average adult, this works out to approximately 2 grams. If the patient is still in the hospital 4 hours later, give one-half of the initial dose of Solu-Medrol^{R}. Six hours later, start Decadron^{R}, 4.0 mgs. intravenously every 6 hours. If Solu-Medrol^{R} is not available, or if the patient arrives at the hospital more than 4 hours from the time of injury, and there is no contraindication to steroid therapy, give Decadron^{R}, 16.0 mgs. I.V. at once. Six hours later start Decadron^{R}, 4.0 mgs. I.V. every 6 hours. Modify the dosage accordingly for pediatric patients.
4. Make the minimum number of x-rays necessary to determine the level of injury, and any other x-rays necessary for associated injuries. Do not attempt to make oblique views of the spine. Do not perform myelography. Any patient brought to the hospital unconscious as the result of head injury should have a scout lateral film made and viewed by a physician prior to making skull x-rays.
5. A rotating list of neurosurgeons and orthopedic surgeons who are willing to accept spinal cord injured patients is at the Mobile Infirmary. To refer a patient to the Spinal Cord Unit, call the Mobile Infirmary, **Telephone No. 433-3511,** and tell the operator that you have a spinal cord injured patient. Your call will be transferred to the Patient Evaluation Facility, or to the Spinal Cord Unit, and the nurse will have a neurosurgeon or orthopaedic surgeon contact you about your patient as soon as possible. If you wish, the nurse will give the names of the physicians on the list and you may select one of the names to whom she may make the first call. If the patient is to be transferred to Mobile, the physician in Mobile will initiate the MAST mission to transfer the patient from the outlying hospital to the Acute Spinal Cord Injury Unit, or will advise that ambulance transfer will be satisfactory.
6. Start a treatment record to send along with the patient, indicating the exact time of injury, the extent of injuries, and the exact time and amount of all medications given.
7. If MAST is unable to come in because of weather or other reasons, and the patient is going to have to remain in the hospital longer than anticipated, and has a cervical cord injury, keep him in head halter traction until and during transfer. If Gardner-Wells Tongs[9] are available, they should be inserted. Printed instructions come with these tongs that are quite specific. They are simple to use, and are almost fool-proof. They can be obtained from Codman and Shurtleff, Boston, Mass.
8. Splint peripheral fractures. Life endangering injuries such as abdominal or thoracic injuries, or severe bleeding, take precedence over anything else.
9. Try to avoid insertion of an indwelling catheter. Using sterile, no-touch technique, empty the patient's bladder every 4 hours. This should be done by the physician. If it is impossible for the physician to be on hand every 4 hours, he should insert an indwelling catheter under sterile conditions, and start the patient on appropriate prophylactic antibiotics. Record the time of catheterization and medication on his record.
10. If the patient is started on steroids, or has a cervical cord injury, and is going to have to remain in the outlying hospital for any reason, begin ulcer prophylaxis.
11. Pressure sores may begin to develop in patients with insensitive skin in the first few hours following injury. If the patient is going to remain in the outlying hospital, he should be placed on a sheepskin and eggcarton pad, if available. Turn carefully every 2 hours up to about 45 degrees on each side, and support completely with pillows. Place in an ordinary, firm hospital bed, not on a special turning frame.

Continued from Page 26

Summary

The foregoing discussion and protocol applies to those patients whose major significant injury is spinal cord injury. In patients who have sustained multiple, very severe injuries, the situation may be drastically altered. Other life threatening injuries may preclude transfer to the acute unit, or initiation of the immediate treatment of the spinal cord injury as outlined above may have to be delayed.

As always, the best method of treatment of these patients is prevention. Television and radio spots during the swimming season are currently in use in and around Mobile. Tent folders are being prepared that will be placed in hotel and motel rooms by cleanup personnel each day, warning against the dangers of diving in shallow waters. Possibly one of the most productive methods of prevention is to have a depth indicator in popular swimming places so that the depth of the water can be known by swimmers.

No amount of treatment can restore neural function in a spinal cord that is completely severed. However, it is felt that systematic treatment involving a dedicated team can provide numerous benefits to the patient. His residual strength can be maintained, and spinal instability can be prevented, hopefully reducing late pain. The length of hospitalization can be markedly reduced. Rehabilitation can be started much earlier, and has been shown to more effective and less expensive. The incidence of urinary tract infection can be reduced, and the numberof patients who achieve catheter free status can be increased. Pressure sores can be prevented, again reducing length of hospitalization and cost of treatment.

The overriding goal of this effort is to improve the quality of life of these patients over what they have experienced heretofore. In addition, each patient who can be returned to employment will represent a huge savings to the citizens of this state. It is far better for a rehabilitated spinal cord injured patient to be on the tax rolls instead of on the welfare rolls, for patient and public alike.

The State Vocational Rehabilitation Service is heavily involved in the implementation of this plan. The plan for the systematic treatment of spinal cord injured patients in South Alabama has the approval of the Board of Censors of the Medical Association of the State of Alabama and of the Alabama Orthopaedic Society, and has the enthusiastic endorsement of the Governor.

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Heat Illness In Athletes

James R. Andrews, M.D., Mitchell Massey, M.D.,
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The athlete is a performer and as such, he is often associated with conditions which place a severe heat stress on the individual. In August, over one million young people in this country will begin football practice for the 1975-76 season. In many areas of the country, particularly the Southern portion, the temperature will exceed 90 degrees fahrenheit and the humidity will go above 70 per cent. Both of these factors tend to produce an extreme heat stress environment which could easily produce heat illness in the training athlete.

Murphy,[7] in 1973, reported that during the previous ten years alone there had been 46 heat stroke deaths in American football. Heat illness in its most severe state, heat stroke, is second only to head injuries as the largest cause of fatalities occurring in football. Since it is believed that 98 per cent of such reactions are avoidable, we feel it is important that physicians, coaches and trainers have a basic understanding of the causes, prevention and treatment of the heat stress problem.

BODY HEAT REGULATION– THERMAL REGULATORY MECHANISM (TRM)

In the human body under resting conditions, basic cell metabolism increases the body's heat production 1.8 degrees fahrenheit per hour while activity such as playing football increases it twelve fold. Since heat loss must balance heat production, thermal equilibrium is maintained by the *Thermal Regulatory Mechanism* (TRM) via circulation, sweating, neural impulse and the endocrine systems.

Sweating is a primary component of this mechanism. Sweat production is a reflex action in response to a thermal stimulus and accounts for approximately 30 per cent of the body's heat loss by evaporation from the skin surface of a hypotonic aqueous solution produced from the eccrine glands. For every one cubic centimeter sweat evaporated, the body loses 0.58 Calories of heat which is extremely important as a protective mechanism. When the environmental temperature rises above skin temperature, over 70 per cent of the body's ability to dissipate heat is lost and evaporative cooling is the primary means of temperature control. Only 2 per cent of the body's weight present as tissue fluid is available for sweat production and any further use of these fluids invites circulatory compromise.

The second component of the TRM is the cardiovascular system. This component regulates the body or *"core"* temperature by transfer of core heat from the central areas of the body (head, neck, trunk) via the circulation to the skin surface for dissipation of heat by conduction, convection and radiation. The core temperature has a very narrow temperature variance (2 to 3 degrees fahrenheit) if it is to remain functionally efficient, whereas, the skin or *"shell"* (S) temperature can vary as much as 20 degrees fahrenheit without serious loss of function. If, however, thermal regulation is to be maintained, S temperature must remain at least 2 degrees fahrenheit below core temperature. If this gradient is not maintained, the skin will in fact form a barrier to heat transfer despite sweating, cooling, metabotic heat or type of clothing worn.

The *shell-core* temperature gradient is maintained by thermoreceptors located in the skin. When exposed to high temperature, they relay stimuli to the heat regulating center in the hypothalamus which activates vasodilatation of peripheral blood vessels resulting in an increase in sweating. This wide spread dilitation results in a drop in the blood volume and a decrease in blood pressure. The cardiac rate is increased to help compensate for this loss of effective blood volume and also to promote a rapid peripheral circulation so more heat can be lost by convection and radiation.

The third component of the TRM is composed of both the neural and endocrine systems which act together. The anterior hypothalamus of the brain is the primary regulator of heat dissipation and conservation. It acts through intergraded reflexes from the skin and from the temperature of the circulating blood to control water balance, sweat glands and vasomotor activity. Stimulus for hormonal activity appears not to be directly related to heat itself, but rather to changes in water and electrolyte balance. In profuse sweating of 2 to 3 per cent of the total body weight during a training period of 90 minutes. either an increase in osmotic pressure or a decrease in the blood volume stimulates production of antidiuretic hormone from the pituitary gland. This hormone in turn acts at the renal tubular level by increasing reabsorption of water and decreasing urinary output. Also, with excessive sweating causing a change in salt balance, sodium loss is diminished by stimulation of the adrenal glands to produce aldosterone. This second hormone produces sodium retention in both the renal tubules and sweat glands at the expense of an increase in potassium (K+) excretion.

While the thermoregulator system governs heat by the above systems, physical dissipation of heat is by evaporation (vaporization), conduction, convection and radiation. As previously stated, one cubic centimeter of sweat releases 0.6 Calories of heat provided it is allowed to evaporate, and that sweat which is removed or simply allowed to run off of the body has no cooling effect. Evaporation is affected by the relative humidity (amount of moisture in the air) and decreases in effectiveness as a method of cooling as the humidity increases. Conduction, convection and radiation

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to be effective as dissipators of body heat depend on movement of air and the environmental air temperature being lower than skin temperature. When air temperature is higher than shell or skin temperature, then evaporation becomes the only effective means of cooling.

HEAT STRESS SYNDROMES

The common denominators for the different heat stress syndromes are heat and high humidity. Heat problems arise as a result of imbalance between the heat production associated with someone's activity and the heat loss through the thermoregulatory center.

There are three types of heat illness – Heat Cramps, Heat Exhaustion and Heat Stroke. Each of the three syndromes will be discussed in regards to etiology, signs and symptomatology, and treatment.

Heat Cramps are the result of a rapid salt depletion from sweating associated with a low salt intake. These usually present as painful cramps of voluntary muscles of the legs and abdomen. These should not be confused with the isolated muscle cramp in the leg due to positional strain or isolated muscle stress. Treatment for heat cramps is an oral intake of salt solution and in the absence of other symptoms the individual may resume his activity after replacing the salt deficit.

Heat Exhaustion is a water and electrolyte problem and is present as either the (a) water depletion form is caused by prolonged sweating (usually over a period of several days) combined with an inadequate intake of water and a relative increase in blood NaCl concentration. The earliest signs and symptoms are progressive weight drop, decreased urine output and severe thirst. Dehydration, weakness, apathy and incoordination develop and finally, if this condition is not corrected, results in circulatory collapse. This type of heat reaction is "tricky" since symptoms are not distressing and frequently are not reported by the athlete, but, in short, this is a slow approach to an acute heat stroke. It can best be spotted by daily weighing of players. The treatment for this type of heat illness is initially removal to a cool environment followed by hospitalization and adequate fluid replacement over a two to three day period.

In the salt depletion form, there is profuse sweating with salt loss associated with copious water intake. It usually is seen in the early days of heat exposure before the salt content of the sweat has been reduced by acclimatization. The symptoms are marked weakness and easy fatigue, headache, muscle cramps, vomiting, nausea, anorexia and apathy. In contrast to the H_2O depletion type, there is very little thirst. The treatment once again is hospitalization and intravenous fluid replacement under laboratory control to correct the water-salt imbalance.

Heat Stroke is a complete failure of the thermoregulator mechanism in a heat stress environment resulting in an increase of the core-heat of the body with a cessation of sweating. The majority of cases present with a rather sudden onset of symptoms. The patient presents with hot, dry skin, rectal temperature 105 degree F to 110 degree F, sudden onset of coma, convulsions, disorientation, involuntary limb movements, rapid pulse often 130 per minute, and rapid labored, gasping respirations of around 35 per minute. **THIS IS AN ACUTE MEDICAL EMERGENCY!** The treatment for heat stroke is initially directed to lowering the temperature by moving the patient to a cool environment, removing his clothing and sponging with cool water or fanning the patient.

As soon as possible, the patient should be placed in an ice bath with a rectal thermometer inserted and left in place during the period of lowering the body temperature. The goal of temperature reduction is to get the temperature reduced to 102 degrees rectally within one hour. Intravenous fluids are given as well as Thorazine (50 mgms IV initially and repeated every 30 minutes up to a maximum dose of 200 mgms) to prevent shivering which produces heat locally.

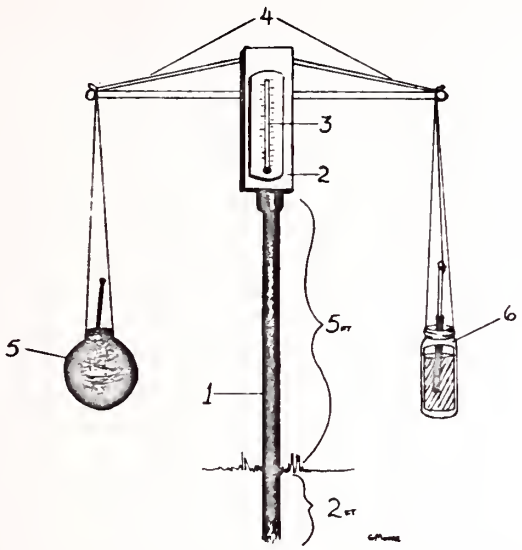
Massaging of the extremities while in the ice bath stimulates heat transfer via circulation. Upon reaching 102 degrees F on the rectal thermometer, the patient is removed from the ice bath and placed in a cool environment under fans. Fluid replacement should be monitored by the central venous pressure and electrolytes by proper laboratory studies. These patients' condition may remain unstable for one or two days and they often manifest complications of liver necrosis, defibrination syndrome, obiguria and anuria, and neurological residuals.

PREVENTION OF HEAT ILLNESS

A. Complete Medical History and Physical Examination: Prior to the beginning of fall practice, each player should have a thorough physical examination with special emphasis given to obtain any history of previous heat illness or peripheral vascular disorders. Athletes who have an illness associated with fever, vomiting or diarrhea, or ones who have received immunizations within the previous 48 hours associated with a febrile reaction are highly susceptible to heat stress. These individuals should not be allowed to practice until they have completely recovered from their symptoms. In addition, persons unaccustomed to working in heat, overweight individuals (especially large interior linemen) and the "eager athletes" who give 100 per cent at all times to impress the coach, should also be watched closely during practice sessions.

B. General Physical Condition of Athlete: The type and duration of training activities during the previous month should be determined. An athlete may be in excellent running condition, but could be in poor heat condition.

We feel that a four to six week pre-season conditioning program, preferably in the area of athletic participation once the season begins, is highly beneficial to getting the athlete conditioned both to running and the environmental heat situation. Athletes should attempt to conduct their own conditioning program at approximately the same time of day as the scheduled practices will be held. No attempt will be made here to recommend a pre-season conditioning program since we feel most trainers and coaches are fully qualified to design their own programs. Generally, this information is made available to athletes well in advance of the beginning of fall practice. This allows the athlete ample



The WGBT instrument (Figure 1) consists of a one-half inch metal rod (1) driven into the ground for central support with a horizontal bar above for suspension of the components (4). A standard outdoor thermometer (3) is mounted on a ten inch piece of 2X4 lumber sprayed with aluminum paint (2). One end of the horizontal bar suspends a globe painted black with a standard chemical thermometer fitted through a rubber stopper up to the 10 degrees mark (5). The globe thermometer reading is a balance between heat gained by radiation and heat lost by convection. At the opposite end of the horizontal bar is a plastic bottle (6) sprayed with aluminum paint and filled with distilled water. (Regular tap water will not do and can not be substituted). Another standard chemical thermometer is suspended from the bar to within three-quarters inch of the top of the bottle. To this thermometer is applied a six inch wick (can be made of a shoelace) which is placed into the distilled water. This wet bulb reading accounts for the cooling by evaporation. (The application of the WBGT Index is explained in Table 1.)

TABLE I
USE OF THE WET BULB GLOBE TEMPERATURE INSTRUMENT TO DETERMINE ENVIRONMENTAL CONDITIONS FOR FOOTBALL

I. Application of Safety Index

Each component of the instrument has been given a factor of importance, as relates to heat stress, in arriving at a safety index or scale. The index reading is obtained by adding:

0.1 X the dry bulb temperature
+0.2 X the black bulb temperature
+0.7 X the wet bulb temperature
WBGT Index

II. Adjust Activity Accordingly During Acclimatization Period

WBGT Index
From 82 to 85 degrees—light exercise
From 85 to 88 degrees—no exercise but may give instructions in the shade
Above 88 degrees—all activity discontinued

III. After Acclimatization (10 days)

WBGT Index
Above 85 degrees—strenuous exercise is stopped
Above 88 degrees—all exercise is stopped

IV.

A. When the wet bulb reading is within three degrees of the dry bulb reading, all activity should be suspended.
B. When the wet bulb reading is from 3 to 5 degrees below the dry bulb—helmets, sweat shirts, and shoulder pads should be discarded and activity slowed down.

A. & B. Apply to both the acclimatized period and afterwards.

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time to get in proper condition before the beginning of fall practice.

C. Acclimatize Athletes to Heat: Acclimatization is an adaptative process which reduces the physiological strain of the environmental stresses, heat and humidity. Most heat illness reactions occur during the first few days of practice. Heat acclimatization requires work in the heat and salt and water replacement for approximately ten days with two 90 minute workouts each day. Once acclimated, a larger quantity of sweat with a lower salt concentration is produced by the eccrine glands at lower skin temperature. This increase in sweat production aids in evaporative cooling of the body.

D. Practice Schedules: Practice sessions should only last one and one-half to two hours and should not be held during the hottest times of the day. Ten minute rest intervals should be provided for every thirty minutes if the training sessions last over an hour. At each rest interval, ten ounces of saline solution (cold water with a salt concentration of 4 teaspoons per gallon) should be given to each athlete. After three days, the salt concentration may be reduced to 3 teaspoons per gallon for the next week and then to 2 teaspoons per gallon thereafter until cool weather ensues. The same quantity and quality of salt solution should be given before and after each practice session during the acclimatization period. Contrary to an old myth, there is no harm in giving ice water to players. Since salt tablets often have a tendency to be irritating to the stomach, we recommend not administering them during practice sessions.

E. Uniforms: When the temperature is over 80 degrees fahrenheit, sweat evaporation is the only effective means of dissipating heat. Addition of a a football uniform decreases the surface area gently for this process to occur. Initial workouts are best conducted in shorts and cutoff T-shirts. Once full uniforms are worn, white light-weight short sleeved jerseys should be worn with the shirt tails left out. Fish-net type jerseys are excellent, but in many instances are too expensive for schools to purchase. Excessive padding, long stockings, long sleeved jerseys and rubbarized clothing should be avoided in the early part of the season.

F. Weight Charts: Each player should be weighed daily, before and after each practice session. Daily weight loss should not exceed 3 per cent of the player's weight or about five pounds. Anyone loosing over five pounds should be observed carefully and encouraged to increase their daily fluid intake. Failure to regain weight overnight which was lost the previous day usually indicates dehydration. Any weight loss of ten pounds or more during any practice session should be considered dangerous and the player not allowed to practice until rehydrated. Placing players on weight reduction diets is discouraged during the period of acclimaatization.

G. Temperature and Humidity Measurement: Measurements of temperature and humidity should be made before each practice begins and every 30 minutes during the practice sessions. The activity should be adjusted according to the environmental conditions. Two methods of measuring temperature for prevention of heat illness are the Wet Bulb Globe Temperature Index (WBGT Index) and the sling psychrometer. The WGBT instrument (See Figure 1) has the big advantage of giving a safety index for exercise and is felt to be the better of the two systems for use in the Southern part of the country (See Table 1).

SUMMARY

The physiology, treatment and prevention of heat illness in athletes have been discussed. We have attempted to stress the importance of pre-season history and physical examination, acclimation of athletes, frequent rest periods during practice with adequate salt and water replacement, use of the proper type of uniforms and methods of heat and humidity measurement. It is imperative for coaches to observe carefully for any signs of heat distress especially in stoic athletes or those determined to make the team. Remember, temperature and humidity are the important factors not the sun and that *Heat Stroke* is an acute medical emergency that requires immediate emergency treatment, otherwise death will ensue.

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The Enigma Of Hirsutism

J. Benjamin Younger, M.D.*

Definitions of hirsutism vary quite widely, but from a practical point of view if a woman complains of excess hair growth, then she should be considered hirsute. In many instances, historical and physical findings reveal that intensive endocrine investigation of the patient would fail to demonstrate an organic cause, yet these patients must be offered reasonable advice concerning their problem. In order to evaluate, treat and advise patients about hirsutism, a review of androgen metabolism will be helpful. Hopefully from this review, one can understand why endocrine function testing in this area is relatively nonspecific and why therapeutic efforts often meet with limited success.

Androgen Metabolism

In women, androgens are thought to be derived through three major sources: adrenal, ovarian and peripheral transformation from prehormones. This concept; i.e., prehormone transformation, is most important. Remember that an androgen prehormone is not only a compound that is transformed into an androgen, but that the compound in its original form may not be even mildly androgenic and that during transformation, large changes in relative potency may occur. The majority of transformation is thought to occur in the liver. However, extrahepatic conversion in tissue such as skin is important, particularly in those patients who manifest hirsutism.[1,2]

While numerous androgens have been isolated and described, testosterone is the one thought to be biologically most important. In the male, for practical purposes, the source of testosterone is the testes and is under LH control. In the female, there are multiple sources and the control mechanism is unknown.

The ovary possesses all the enzymes necessary for testosterone synthesis and androgens are the precursors for estrogens. The major site for secreted ovarian androgens is the stroma. Ovarian vein levels of testosterone are reported to be 2 to 10 times greater than the peripheral vein levels. It is estimated that the ovaries contribute 5 to 20 per cent of the total blood testosterone in a woman. Adrenal production of testosterone is likewise variable and has been measured by comparing adrenal vein values versus peripheral vein values. Occasionally no gradient has been noted, suggesting either no production or that there is variable secretion of this hormone on a pulsatile or diurnal basis. It is estimated that 0 to 30 per cent of the plasma testosterone is of adrenal origin.

Peripheral transformation of prehormone to testosterone is perhaps the major source of testosterone in normal and some hirsute women. The precursors may be of adrenal or of ovarian origin, or come from some other source. The liver and skin are the predominant sites of transformation. Androstenedione is the most important prehormone, serving as a precursor for 50 to 70 per cent of blood testosterone. Dehydroepiandrosterone accounts for another 15 per cent in normal women.

Androstenedione quantitatively appears to be the major androgen secreted by the ovary, but it is to be remembered as being only 5 to 20 per cent the potency of testosterone. It is excreted mostly as a 17-ketosteroid. From the adrenal, greater amounts of androstenedione and 11-B hydroxyandrostenedione than testosterone are found.

Dehydroepiandrosterone, the least potent of the 3 major androgens, is 1/20 the potency of testosterone. It is circulated primarily as a sulfate; it is loosely bound to plasma protein and is probably inert. It is excreted in the urine in the conjugated and unconjugated form and a small portion excreted as a 17-ketosteroid.[1,2]

Other androgenic steroids, such as dihydrotestosterone which is 1-1/2 to 3 times as potent as testosterone, have been detected. However, little is known about their metabolism and, hence, will not be discussed.

Laboratory Studies

Numerous laboratory studies have been utilized in evaluating androgen production. The most common one is urinary 17-ketosteroid excretion per 24 hours which must be interpreted in light of a 24-hour creatinine to insure that a collection is complete. Normal women excrete 5 to 15 mgs per 24 hours. Since they only produce a little over 200 ugs of testosterone per day and only 50 per cent of this metabolized to a 17-ketosteroid, then it is obvious that huge increase in testosterone production would have to occur if any significant change in the 17-ketosteroid excretion were to be noted on the basis of testosterone. Fortunately, several conditions associated with excessive androgen production also result in the secretion of excessive amount of prehormones and weak androgens and thus 17-ketosteroids remain a useful screening test in evaluating the hirsute or virilized patient.

Urinary testosterone excretion does not reflect the testosterone production rate in that other steroids are metabolized and excreted as testosterone glucuronide. Blood and urinary cortisol studies are useful only in that they reflect adrenal function and when elevated, may assist in defining the disease process. It appears that adrenal androgen secretion is not under direct ACTH control in many instances.

Blood levels of androgens (testosterone) have been quite popular tests utilized in evaluation of the hirsute female. It should be remembered that blood testosterone level is a function of blood production rate and metabolic clearance rate, and thus a blood level may not be representative of

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the actual state of androgenicity. This accounts for the great discrepancy seen in laboratory testing of various patients with hirsutism of a common etiology.

It has long been recognized that there is a wide range of values among groups of hirsute and normal women and that in general there is often a lot of overlap in values among individuals of the two groups. Generally hirsute women *as a group* will have a higher mean testosterone level than will normal women, but that is about the extent of the correlation.

From the previous discussion, it is apparent that testosterone may arise from many body sites. A valid study of androgen metabolism requires that the total testosterone entering the plasma (the production rate) be measured regardless of its source. This is best done by the metabolic clearance technique whereby PR = MCR X [T]. PR is production rate, MCR is metabolic clearance rate and [T] is plasma testosterone concentration. This study is performed using either single injection or continuous infusion of radioactive labeled steroid and is therefore generally unavailable to the practicing physician. This study, however, can explain many of the discrepancies we see between available clinical laboratory values and the clinical picture. It can readily be seen that an individual with increased production rate and clearance rate may have a normal serum testosterone, while an individual with a normal production rate but decreased clearance rate, will have an elevated blood level. It is to be remembered that many factors, especially *drugs* may alter the clearance rate thus producing abnormal or unexpected blood levels. It does not localize the site of increased production either. In general, use of this study has shown that most all patients with various forms of hirsutism (idiopathic or ovarian) will have an increased testosterone production rate even though 30 - 40 per cent may have a normal blood level.

Other approaches have been tried, including combined adrenal and ovarian suppression and stimulation tests. In general, these have not proven valid, mainly because of the large number of assumptions made during their design and interpretation. Dexamethasone suppression, ACTH stimulation, estrogen-progestogen suppression and HCG stimulation studies have all been based on the same principle as cortisol suppression or ACTH stimulation of the adrenal gland. Unfortunately, adrenal and ovarian vein catheterization during these maneuvers has yielded information that shows the conclusions often drawn from these maneuvers are invalid.

Estrogen suppression of the ovaries is difficult to interpret. Estrogen may decrease the metabolic clearance rate of testosterone, resulting in an increased level. It may suppress FSH, but in some cases LH is increased and perhaps more androgen is produced. Estrogen may increase the testosterone binding globulin thus elevating the blood level of testosterone. This is a common phenomenon seen during pregnancy. There also appears to be differences seen in the same patient relative to short-term versus long-term suppression. Although these suppression tests do not uniformly yield information to localize the exact site of the excess androgen production, these tests may be useful in *determining* which agents may be administered for long-term *therapy* in these patients.

In view of the inadequacies of other tests for localization of androgen production in hirsute women, the technique of selective ovarian and adrenal vein catheterization in the awake and alert patient has been developed. This gives one the opportunity to measure several androgens in blood samples and compare them to levels found peripherally. While the idea seems great, there remains many problems associated with this technique: the vessels are difficult to locate; blood flow is often quite slow; there is mixing with blood from other areas; secretion of steroids may be pulsatile and not constant and, perhaps above all, it is difficult to collect samples from both right and left sides.

In spite of these problems, this technique may prove to be the most useful one in localizing the site of excess androgen production as far as tumors are concerned. Most enlightening, however, has been the finding that many patients with polycystic ovary syndrome and idiopathic hirsutism actually have *combined* source of excess androgen. These patients seem to derive only 1/3 to 1/4 of their testosterone from the prehormone androstenedione, whereas in normal women, 1/2 comes from this source. It appears at times that testosterone is secreted in excessive amounts by the ovary and/or adrenal and does not come primarily from peripheral conversion.[1,2]

The Skin as an Endocrine Organ

In the normal female, almost all the biotransformation to testosterone occurs in the liver. However in certain hirsute states, extrahepatic metabolism such as in the skin may be largely increased. We can look upon the skin as an enormous endocrine organ that extracts androgens from the circulation, binds and converts them to more active or inactive products. Certain skin; e.g., the prepuce, can convert androgens to dihydrotestosterone more readily than other tissue. It is to be remembered that certain individuals, like certain parts of the body, exhibit a more sensitive response to androgens than do others, and that perhaps this is genetically or racially controlled. Normally all hair follicles are formed by maturity; no new follicles appear in later adult life. The total number is approximately the same in all individuals and there is no real sexual differences. Man indeed remains "the naked ape" and the resultant hair patterns represent hormonal adaptations. There are two main types of hair: vellus (soft, unmedullated, occasionally pigmented and rarely more than 2 cms long) and terminal (coarse and longer, often medullated and pigmented). Both sexes retain the ability to grow coarse, thick, pigmented terminal hair on face, chest, back, extremeties, along with pubic and axillary regions. These last two regions are the most sensitive to androgens. Hair is found all over the body except the soles of the feet and the palms of the hands. Local hormone thresholds account for the different sexual patterns seen and many factors, both intrinsic and extrinsic, affect these.[3,4]

Clinical Evaluation

Certain definitions are important. Virilization refers to excess development of androgenic sexual characteristics

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other than hair growth alone. Hypertrichosis refers to excessive, non-sexual hair, whereas hirsutism refers to excessive sexual hair.

In evaluating the patients with hirsutism, the historical and physical findings are much more important than any laboratory testing. If, however, virilization is present, then the patient does deserve indepth endocrine testing if the cause is not readily apparent. Historically, most patients with hirsutism give a similar story: Within a few years of menarche (less than 10), they begin to notice increased hair, often associated with acne and obesity. Usually menses have never been regular and are classically anovulatory or oligo-ovulatory. They have no other signs or symptoms of virilization. Their obesity is not centripetal; their muscles are large and not wasted nor weak.

Patients with regular menstruation almost always represent idiopathic or familial hirsutism and work-up of the patients is unrewarding unless specific physical findings warrant it. Drug history is most important in evaluating these patients. When a patient truly appears cushingoid, has late or recent onset with rapid progression, has associated virilization, or has a pelvic mass, then indepth study is appropriate. Hirsutism is rare during pregnancy and onset or progression then deserves investigation.[4]

As indicated previously, few tests are valuable in actually defining the source of abnormal androgen production when it is not obvious on clinical grounds. In the patients with idiopathic hirsutism or polycystic ovary syndrome, slightly elevated 17-ketosteroids and testosterone may be found, but markedly increased levels in these tests suggest specific ovarian or adrenal pathology. Relatively elevated LH over FSH levels suggest polycystic ovary syndrome. Normal diurnal variation in plasma cortisols and suppression to less than 5 ugs in the early morning sample following 1 mg of dexamethasone at midnight suggests no adrenal disease. Pelvic endoscopy may be necessary to diagnose certain ovarian problems. In the virilized patient, if extensive laboratory testing does not reveal the source of excessive androgens, then surgical exploration is warranted.

Therapy

Therapy for hirsutism, regardless of the cause, is at best poor. Amelioration of specific disease states often does not rid one totally of excessive hair growth, and it should be pointed out to the patient that the goal of therapy is arrest of the process, not riddance of hair. In hirsutism, either of the idiopathic or ovarian etiology, the same therapeutic approaches are used. Estrogens can cause increased testosterone binding to globulin, decreased gonadotropin stimulation and directly affect the metabolism of the hair follicle.

Progestogens likewise decrease gonadotropin secretion and can displace active androgens at the skin. These agents, either alone or in combination, remain our main medical tool to combat hirsutism. Adrenal suppression with prednisone or dexamethasone to decrease this contribution to the androgen pool may be effective in certain individuals.

Perhaps our most promising drugs will be the antiandrogens such as cyproterone acetate or 17a-methyl-B-testosterone. They offer a direct competition with testosterone at the local level, but do not give much of a biologic response. Wedge resection for Stein-Leventhal syndrome has at times seemed useful and, as a last resort, castration has on occasion proved beneficial, although this is certainly not recommended as a primary means of therapy.

Supportive therapy is equally important to the hirsute female. Psychologic and dietary support are most important. Realistic goals should be set and the patient must understand this will be a long-term program. Attempts should be made to reduce or avoid stress, as this may increase adrenal output of androgens and promote a vicious cycle. Shaving is often undertaken, but eventually this will result in a "five-o-clock shadow" and will need to be done daily. Chemical depilatories produce the same result and often cause skin rashes. In general, these should be avoided. Wax depilatories offer better long-term results and are probably useful. Bleaching is often effective, particularly in milder cases, and in general is used early in the treatment. Plucking should be avoided as it often causes pustule formations and scarring.

Electrolysis remains the main supportive measure. This actually involves the destruction of hair follicles. It is expensive, time-consuming and uncomfortable. When the hirsutism is extensive, then this is unsatisfactory in that minute scars are produced with the destruction of the follicle and disfigurement may occur. A combination of hormonal approach and supportive measures is generally employed and will offer the best long-term results.[3,4,5]

Summary

A review of androgen metabolism has been given in hopes that it will help one develop a reasonable approach to the patient troubled with hirsutism. The limitations of the various laboratory studies have been noted. Useful studies include 24-hour urinary 17-ketosteroids, blood cortisol studies with overnight dexamethasone suppression, blood testosterone level and serum FSH and LH values. If these studies, combined with an astute, historical and physical assessment of the hirsute patient, fail to suggest a cause, then more indepth studies will most likely be unproductive.

Investigation of the normally menstruating patient with a normal physical exam will likewise be unproductive. When virilization is present or when there is progressive hirsutism during pregnancy, then extensive study is warranted. Therapy in general remains poor but a combined program of patient education, supportive measures and an estrogenic oral contraceptive agent such as Enovid-E perhaps offers the best results.

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Transactional Analysis For The Physician: An Introduction

Taras J. Cerkevich, Ph.D.*

This is the first in a series of articles on transactional analysis designed to acquaint the physician with the basics of the theory. The thrust of the series will be to present useful techniques the physician may use in dealing with the games, ploys and manipulations that "troublesome" patients present. By means of this series, the physician will have the opportunity to learn to feel more comfortable and relaxed, not only at the office, but also at home with the family.

Distinguishing Characteristics Of TA

Transactional analysis, popularly known as "TA", is a method for analyzing and changing human behavior. The method, developed by Eric Berne, a California psychiatrist, first achieved prominence in the early '60's with the publication of Berne's *Games People Play*.[1] Since that time, numerous additional works have been published on TA[2,3,4,5,6,7,8,9,10].

Although Eric Berne originally conceived of TA as a system of psychotherapy, TA has also been applied in such non-psychiatric settings as industry, school, church and the physician's office. In fact, TA can be used to improve human relations in almost any setting. Although TA is based in Freudian theory, it offers advantages over other psychoanalytically oriented theories of human behavior.

First of all, the language of TA consists of easily understandable, commonly accepted words such as "pay-off", "game", "stamp", "patsy", etc. The words that are used have precise meanings, that are free of surplus abstractions. By using everyday English, students of the system can easily talk of human behavior in terms which permit the empirical observation and charting of the phenomena of human behavior.

Secondly, the theory of TA has been very precisely formulated so that the user of the theory can reconstruct patient behavior and predict future patient behavior sometimes with an uncanny degree of accuracy.

Thirdly, TA is highly directive and, thereby, not time consuming. Whereas in most psychoanalytically oriented theories the burden of change is placed on the patient, the user of TA does not hesitate to assign homework, give permission for or give injunctions against behaviors, reinforce behaviors or contract with the patient.

Value Of TA For The Physician

TA is valuable for the physician insofar as it gives the physician a tool whereby he can understand and change not only his own behavior, but also the behavior of his co-workers, patients and family. The physician who applies TA consistently in his practice will find that he or she will become not only a more effective leader and provider of health services, but will also find an increase in self-confidence, more co-operation and less tension among office personnel and higher work efficiency in terms of increased output and decreased wasted time. Applying TA in the home, the physician may find it easier to communicate with and understand the spouse and the children, subsequently decreasing unnecessary tensions that may add to an already tense and hectic schedule. In other words, the physician may find it easier not to take family problems to the office and office problems to the family.

The Theory

The whole theory of the TA may be summarized as follows: When an infant is born, it is born into a certain environment. The child is born with an instinct for survival and its survival depends on certain parental figures. (These parental figures include not only the natural or adopting parents, but also anyone who is in charge of the child, e.g., aunts, teachers, big brother, big sister, the minister, etc.). These parental figures set up certain rules of behavior and teach the child what feelings it is supposed to have about itself and its environment. At an early age – most theorists would place it at two years of age – the child evolves a position about himself and his relation to the world. The child then evolves a script, a programme for living which attempts to prove the veracity of the child's life position. In living out this script, the individual chooses friends, business associates, a profession, a religion, hobbies, a spouse, and amongst other things, sometimes even a time, place and manner of dying, all for the purpose of proving this life script. In choosing the various actors, actresses, acts, scenes and themes of his or her life drama, the individual sends out certain messages to others in the environment. These messages are designed to "hook" others into the complementary games and life script of the individual. When the individual receiving the messages takes the "con", the drama begins. The players move appropriately until each advances their particular life script one step closer to their ultimate payoff.

*Clinical Psychologist, Mobile. Presented at the Transactional Analysis Instructional Course, March 7-9, Mobile, sponsored by The Gulf Coast Chapter of The Alabama Academy of Family Physicians.

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TA holds that most everyone has the potential to behave in an effective, creative and satisfying manner. TA provides the physician with a means to utilize that potential and thereby effectively manage not only his or her own behavior, but also the behavior of staff and patients.

How To Use TA

The first step in using TA is to observe and listen. The user, in this case the physician observes everything about the speaker – whether that be patient, staff, friend or family. The physician observes the speaker's facial expression, posture, type of clothing, hand movements, eye movements, grooming, stance, gait, etc. He also listens not only to *what* is said, but also to *how* it is said – the speed of the speech, the number and pacing of pauses, giggling, sighing, coughing, the type of vocabulary, whether it be emotional, authoritative or matter of fact. After listening and observing, the next step is to figure out who is in control of the speaker. Is it a detached, factual, objective Adult? Or is it a Child with not-OK feelings? Or is it a controlling, authoritative Parent? In trying to answer these questions, it is also useful to sort out the speaker's OK feelings along with the "shoulds" that the speaker subscribes to. By this time, the physician should be able to determine what this patient or staff member is trying to prove: Is the speaker trying to prove that his life stinks? Or is the speaker trying to prove that the listener's life stinks? Or is the speaker trying to prove that life stinks? (A no answer to all of these three questions probably indicates that the speaker feels OK about himself and the world.) The final step is to examine how this individual is attempting to prove his life position. In other words, the physician asks himself: What psychological games is this person playing and how is this person trying to fit me into his games and life script?

In responding to the speaker, the physician needs to know his own *stimulus value*, i.e., the physician needs to examine the messages he or she is sending out to co-workers or patients. For example, the physician whose basic life position is, "I'm not OK, but you're OK" may tend to attract people who take advantage of him and who make make him feel uneasy, inadequate or stupid. He may find it difficult to supervise sub-doctoral staff and may feel that he is inferior to his colleagues. As a further example, the physician whose life position is, "I'm OK, but you're not OK" may find that he tends to attract people who enjoy staying in a dependent position. At the same time, he may alienate others by bullying and preaching. He may also adamantly hold to rigid points of view while sub-doctoral staff and colleagues feel terribly threatened by his presence. (These examples are, of course, illustrative only of extremes).

Once the physician has become aware of his stimulus value to the speaker, the physician can then decide whether or not his "sweatshirt message" is one that is conducive to psychological growth and effective problem solving. In order to do so, the physician needs to cathect over both the self-defeating adaptations learned in Childhood ("games", "rackets" and "stamps") and the Parental desires to nurture and preach. This cathexis can be performed by objectively evaluating the repertoire of feelings, dogmas and behaviors that one has at hand and estimating what the probable consequences of a given response may be.

Talking TA

The physician then takes this information into account along with the data that has been collected about the speaker. When the physician is ready to respond to the speaker, he or she may want to observe the following points:

1. Stress the facts and orient the conversation toward the facts of the matter at hand. The "facts" not only include objective data, but also any feelings or opinions that the speaker may express.
2. Orient the speaker – whether that be a patient, co-worker or family member – toward problem solving. Be sure to point out what the consequences of any given course of action may be.
3. When answering a speaker, in addition to the factual, problem solving content of the response, the physician should also bear in mind that the quality of the response has a lot of bearing on the listener's reception. A physician whose voice, posture, personal appearance, facial expression and eye contact conveys a great deal of concern and enthusiasm will be able to manage another's behavior more effectively than the physician who sits in a dejected posture.
4. Vocabulary should be kept to plain simple, easy to understand English. Technical jargon and multi-syllabic words may impress the listener, but they do not educate the recipient of such verbiage. Sentences should be crisp and garnished with verbs. Adjectives should be kept at a minimum. Answers should be direct, to-the-point, specific and especially truthful. When a "yes" or "no" answer is required, "yes" or "no" should be answered without any rationalization or intellectualization.
5. The physician should not hesitate either to forbid any undesirable behaviors or encourage any positive behaviors. Positive strokes delivered after the performance of healthy behaviors increase the consultant's self confidence, self-esteem and desire to engage in effective problem solving.

Summary

In this first article, I have attempted to outline the value of TA for the physician. Future articles in this series will explain the theory for the physician so that the interested reader can learn more about TA for his or her personal use. Topics to be covered include: the structure of personality, the psychopathology of personality, games, strokes, time structuring and life scripts.

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Modern Concepts In Radiation Therapy Practices In Breast Cancer Management

David S. Levy, M.D.*

INTRODUCTION

In spite of intensive campaigns designed to encourage women to examine themselves and the introduction of diagnostic methods such as mammography, xeroradiography and thermography, it is estimated that between 40,000 and 50,000 women die annually in the United States from breast cancer. With the risk of women developing breast cancer estimated at five per cent, and a continued rise in incidence after 30 years of age, few practitioners of medicine will not have direct contact with this malignancy, as it initially presents or progresses by involving other organ systems.

The emotional impact is considerable. To the woman, it means the loss of a structure identified with her femaleness, and to the entire family, it raises the possibility of disruption of family life and dread of loss of wife and mother.

In an effort to improve patient survival as well as quality of life in the incurable patient, many treatment modalities are now utilized, these being: surgery, chemotherapy and radiation therapy, either singly or in combination. Although radiation therapy has not been shown to increase five-year survival statistics, we feel that it may be used adjunctively to surgery or as primary treatment of breast cancer in the patient who is inoperable. Supravoltage radiation may be employed as part of a planned pre-operative program or post-operatively in an effort to decrease local recurrenee. Radiation offers an excellent means of palliating localized distant disease.

Pre-Operative Irradiation

The combination of pre-operative irradiation and surgery is based on the principle that the inactivation of the reproductive capacity of a large percentage of cells by ionizing irradiation will inactivate a similar percentage of the relatively few cancer cells remaining in the irradiated region after surgical removal of the tumor.[11] This reduced viability would theoretically decrease the possibility of tumor regrowth locally and distally.

In 1970, Fletcher and his colleagues at the M.D. Anderson Hospital reported on their experience with 982 patients divided into three groups.[6] One group was treated by radical mastectomy alone, and one by radical mastectomy with supplementary pre-operative radiation for those patients who had border-line operable lesions, or a "disturbed" biopsy. A third group of patients had radical mastectomy and post-operative radiation. The five-year results were 70 per cent five-year survival for the operated only group; and 56 per cent with pre-operative radiation. It was felt that the pre-operative irradiation reduced the incidence in local recurrence and possibly led to an improvement in survival rates as well, since the pre-operative treatment program was utilized for a group of patients with a theoretically poor prognosis.

It becomes apparent that neither this nor other reports of the usage of pre-operative irradiation therapy can be considered definitive, but they suggest that this modality may enhance survival. A randomized clinical trial is needed to answer this important question.

Post-Operative Irradiation Therapy

Although it has not been proven that post-operative irradiation increased the survival rate in patients with breast cancer, there is quite convincing evidence that radiation does decrease local recurrences.[11] The ten-year results of the Manchester Randomized Study have been reported and they seem to show that post-operative irradiation decreased the rate of local recurrence, but did not significantly affect the survival rate.[9] The National Surgical Adjuvant Study showed that regional recurrence in the patients given post-operative irradiation was markedly reduced.[4] It now appears that the burden of proof falls upon anyone who denies that post-operative irradiation diminishes the risk of local or regional recurrence.

Indications

The policy in the Radiation Oncology Department of the University of Alabama in Birmingham Medical Center is to irradiate the supraclavicular and internal mammary nodal chains when there is histopathologic evidence of metastatic tumor within the axillary nodes of patients with outer quadrant lesions. All patients with inner quadrant or central lesions receive post-operative radiation. Chest wall irradiation in addition is recommended if 50 per cent or greater of the axillary nodes are noted to contain metastatic disease at the time of pathologic study.

Techniques

In this department, the AECI Caesatron which emits a 662 KEV photon is utilized to treat the supraclavicular and internal mammary nodal chains. In certain instances, the Siemens 18 MV Betatron, which is capable of producing

*Assistant Professor, Department of Radiation Oncology, University of Alabama in Birmingham Medical Center.

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electron beams from 4 to 17.5 MV, may be used to irradiate the above-mentioned areas. Electron beams ranging from 9 to 12 MV are most commonly used, depending upon the chest wall thickness. B-mode ultrasonography is useful in measuring the thickness of the chest wall.[1]

Cobalt 60 is generally used when the tangential fields are applied to the chest wall.

The recommended dosage is 5000 rads in 20 fractions over a calendar period of four weeks.

Inoperable Breast Cancer

In patients with lesions which are technically inoperable according to Hagensen's criteria, irradiation therapy is often recommended.[7]

With megavoltage equipment, the treatment is given for a longer protracted course during which a 6000 rad tumor dose is delivered to a comprehensive area encompassing the chest wall and breast; while the internal mammary chain, axilla and supraclavicular areas receive 5000 rads. Additional radiation may be given through reduced fields to residual disease.

With this technique of radiation therapy, five-year survival rates in the range of 30 per cent can be expected. Quite acceptable local control is obtained.

Metastatic Disease

Radiation therapy plays an important role in the treatment of patients with metastatic breast cancer. The goal in this situation is palliation. Radiation therapy can be utilized to relieve pain in both bone and soft tissue lesions. Fractures can be prevented in areas of stress when the skeleton is involved with metastatic lesions. Lymph nodes which have not been previously irradiated can be resolved. Central nervous system lesions can be treated and thereby allowing the patient to function in a more satisfactory manner.

Generally speaking, doses in the range of from 2000 rads in one week to 3000 rads in two weeks are employed. In certain specific instances, a higher more protracted dose may be recommended.

Summary

1. Pre-operative radiation therapy is indicated in the stage III lesion, the lesion of border-line operability or the patient in whom a prior biopsy with secondary complication of biopsy has been performed.

2. Post-operative radiation therapy is advocated to the supraclavicular and internal mammary nodal chains when the primary lesion is a medial quadrant or central one, or in the case of outer quadrant lesions when there are lymph nodes found within the axillary specimen at the time of pathologic interpretation.

3. Chest wall irradiation is recommended when greater than 50 per cent of the lymph nodes within the axillary specimen are found to contain metastatic tumor.

4. Cobalt teletherapy has been shown to be effective in the treatment of inoperable breast cancer.

5. Radiation therapy is invaluable in the local palliative treatment of the patient with metastatic breast cancer. Quality of survival is greatly enhanced.

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Maternal, Child Health Course Announced

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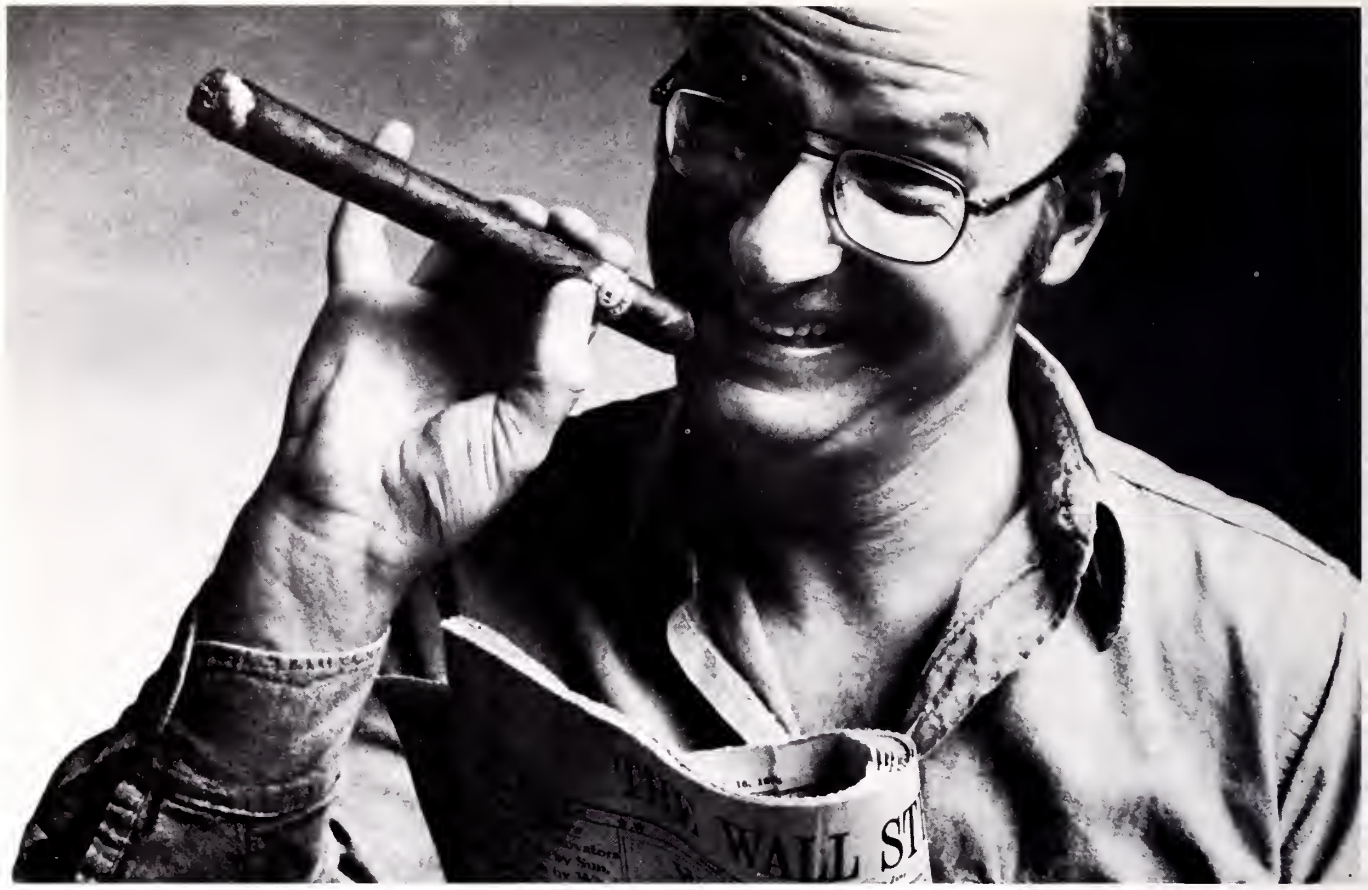
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Career Development Programs. Three-year academic and residency programs consisting of one year of academic training leading to the degree of Master of Public Health combined with residency training in Pediatrics or Obstetrics-Gynecology.

Applications are now being accepted for the group entering in July or September, 1976. For information, write to Helen M. Wallace, M.D., School of Public Health, University of California, Berkeley, California 94720.



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After	WITHOUT the help of a tax-sheltered account with us	WITH the help of a tax-sheltered account with us
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10 Years	14,570	23,090
15 Years	25,450	42,904
20 Years	39,750	71,633
25 Years	58,560	113,289
30 Years	83,280	173,688

Note: Table assumes annual contribution of $1,500 deposited at first of each year, 25% tax bracket, and all figures are based on a 7-1/2% per annum investment return, compounded quarterly.

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Physician Placement Service In Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

General Practice: (Family Physician) Age 30; University of Toronto 1969; National Board; seeking solo or associate practice. Available September 1975. LW-1

General Practice: (Family Practice) Age 38; University of Nebraska 1966; seeking associate or group practice. Available January 1976. LW-1/1

General Practice: Age 46; Syracuse New York 1955; National Board; seeking group or institutional practice in town less than 20,000. Available September or October 1975. LW-1/2

Internal Medicine-Pediatrics: Age 28; University of Alabama 1973; National Board; interested in town greater than 10,000 population. Available July 1976. LW-4/2

Internal Medicine: Age 27, Louisiana State University 1974; seeking assistant or associate practice. Available July 1977. LW-4/1

Ophthalmology: Age 28, University of Alabama in Birmingham 1974; Available 1978. LW-10

Ophthalmology: Age 28, Tulane University 1971; Board eligible; seeking solo, associate or group practice. Available July 7, 1976. LW-10/2

Ophthalmology-Ophthalmic Pathology: Age 29; Meharry 1970; Board eligible; seeking associate and/or institutional practice. Available July 1976. LW-10/1

Orthopedics: Age 32; University of Tennessee 1969; Board eligible; seeking solo, associate, group, industrial or institutional practice; Available January 1976. LW-11

Orthopedics: Age 29; State University of New York at Buffalo 1972; Board eligible; seeking associate practice. Available July 1976. LW-11/1

Pediatrics: Age 27; University of Alabama 1973; seeking group practice. Available July 1976. LW-7/1

Pediatrics: Age 31; University of Alabama 1970; National Board; Board eligible; seeking associate or group practice. Available August 1976. LW-7

Surgery: Age 30; University of Florida 1972; Board eligible; seeking solo or associate practice; Available July 1977. LW-8/3

Surgery-Thoracic & Cardiovascular: Age 38; Medical College of South Carolina 1964; Board certified; seeking group practice. Available September 1975. LW-8/1

Surgery-Thoracic & Cardiovascular: Age 35; Ohio State University 1966; Board certified; seeking associate or group practice. Available January 1976. LW-8/2

Urology: Age 32, University of Arkansas 1969; Board certified; Available July 1977. LW-9

Urology: Age 32; Northwestern University 1968; National Board; Board eligible; Available January 1976. LW-9/1

Urology: Age 30; Northwestern 1968; National Board; Board eligible. Available January 1976. LW-9/l

Urology-Urol. Surgery: Age 31; University of Tennessee 1969; National Board; seeking associate or group practice. Available Jan-Feb 1976. LW-9

PHYSICIANS WANTED

(Opportunities For Practice)

Family Practice Physicians wanted in East Central Alabama City serving trade area of 40,000 population. Well equipped JCAH fully accredited 191-bed hospital and 52-bed skilled nursing home and fully accredited school of nursing. Location of area Mental Health-Mental Retardation Center. Fulltime radiology and pathology. Excellent opportunities in solo practice, partnership, or multispecialty clinic. Office space available for reasonable rental. Invitations to visit with expenses paid will be directed to those who qualify. PW-10

General Practitioner, Obstetrician-Gynecologist, Family Practitioner needed in progressive coastal community with trade area of 30,000 population. Two man practice located adjacent to an excellent 100-bed hospital. Medical school within 55 miles. Unlimited hunting, fishing, golf, tennis and water sports. PW-1

General Practitioner; associate wanted in a three physician general practice in a rural county near Mobile. Salary initially with anticipated early partnership arrangement. 30-bed county hospital adjoining the office. PW-1/5

General Practitioner: Opportunity in town of 3,000 population located in west Alabama in trade area of 20,000 population. 30-bed hospital in the town. Nearest large city 50 miles distant, population of 150,000. The Medical Clinic Board is authorized by the town to provide office space and arrange adequate housing. Farming and industry in the community. Churches, schools, and recreational activities. PW-1/8

Wanted—**2 General Practitioners, 1 Pediatrician** to locate in Central Alabama town with 17,000 population and a trade area of 35,000 population. Located near large city with specialty consultants available. Good 68 bed hospital with plans for a new 85 bed replacement hospital in the near future. Excellent fishing and camping, hunting, golf and schools. Excellent location to raise a family and practice medicine. Healthy stable economy. Minimum on call, none on weekends. Office suites available rent free for the first 12 months, also other financial assistance available; including moving expenses. Invitations to visit with expenses paid. PW—1/4

Opportunity for **General Practitioner** in northeast Alabama community of 1,200 population, trade area of 6,000-17,000 population; nearest large cities 13-20 miles. Physician in the town died recently. Office space and housing readily available. Government work and industry. School and several churches. Recreational and social activities.

Gynecologic waste-baskets



by Bruce A. Harris, Jr., M.D.
Department of
Obstetrics & Gynecology,
College of
Community Health Sciences,
University of Alabama.

(Editor'sNote: The opinions expressed here reflect that of the author. They do not reflect those of the editorial review board of this journal.)

The purpose of this paper is to illuminate a series of situations in which the practitioner seeing a female patient tends, almost subconsciously, to drop her into a preassigned category. This, in turn may lead to misdiagnosis and incorrect treatment.

P.I.D.

Pragmatically any female patient, especially if she is black, indigent and/or encountered in an emergency room, is likely to emerge bearing the label "P.I.D." Although generations of gynecologic teachers have condemned this term, it still persists.

What is the reason for its longevity? Merely, that it is easier to apply a label than to pursue a diagnosis. Upon what criteria are the diagnosis based? Usually, adnexal tenderness and tenderness upon motion of the cervix. In order to make a diagnosis of salpingo-oophoritis with reasonable certainty, pyrexia, elevated white count and/or the presence of masses and/or a positive culture are highly desirable. If a patient presents with pelvic pain, especially if the cause is not obvious, she is likely to be labelled "P.I.D."

Every gynecologic specialist is familiar with the long-faced, self-pitying, neurotic woman who comes to him with the complant of "infected ovaries". A careful study of the patient will show that she has had no previous illness, or possible exposure to any venereal infection. Pelvic examination will show tenderness on motion of the cervix and bilateral adnexal tenderness. The patient will state that her physician (or physicians) has treated her with antibiotics, to no avail.

It cannot be sufficiently overemphasized that a great many women, especially slender ones, and especially those with a tendency toward pelvic neurosis, will exhibit tenderness on motion of the cervix and tenderness upon palpation of the adnexa. It is instructive to look through the laparoscope at the moment when another physician is examining the patient vaginally. The degree of penetration of the pelvis and displacement of the pelvic organs produced by the examiner's fingers is most impressive. It will then be easy to understand why many women complain bitterly upon being examined, especially when the examiner probes deeply and asks: "does it hurt you here?"

Pelvic pain and tenderness at times seem almost unrelated to the amount of disease which is actually present. Any experienced gynecologist can recall finding a pelvis loaded with endometriosis, when the patient had exhibited hardly any symptoms or signs of this disease. Moreover, the presence of pelvic masses may indicate many diseases, from neoplasm to functional cyst. However, the diagnosis of "P.I.D.", or infected tube, is one at which the physician's mind may cease to function, and the treatment becomes the (usually useless) administration of an antibiotic.

Three cases will illustrate this point:

Case 1: A 35-year-old black female entered the emergency room complaining of "low pain". A fever of 101 degrees was noted. The patient complained of extreme pain and tenderness upon examination and was admitted to the GYN service with a diagnosis of "P.I.D.". Here, the resident again attempted to examine her, with the same results. After two days of vigorous antibiotic therapy, but no diagnosis, the patient was found to have an ischiorectal abscess.

Case 2: A 22-year-old black female entered the emergency room complaining of "pain all over". Her temperature was 102 degrees. On abdominal examination, the belly muscles were held rigidly. The patient vigorously resisted pelvic examination. The admitting resident sent her to the GYN service, where she was described by the house officer on duty as having signs and symptoms of pelvic peritonitis. On the following day, the patient was noted to have a stiff neck. Lumbar puncture revealed spinal fluid findings characteristic of meningitis, and the patient was transferred to the medical service.

Case 3: A 35-year-old white female secretary was referred because of "salpingitis". Her previous physician stated that she had not responded to vigorous therapy with various antibiotics. On examination, the temperature was

normal and the abdomen, soft. Pelvic examination elicited tears, cries and expressions of great distress, but no masses. The sigmoid was noted to be filled with stool.

After a thorough enema, laparoscopy was performed. No disease of the uterus or adnexa was found. The patient was referred for psychiatric evaluation.

In summary, it is hoped that the common practice of labeling all female pelvic pain as "P.I.D.", or "infected ovaries", will be replaced by a more judicious search through the possible list of diagnostic alternatives.

We'll give you some pills to regulate your periods...

The estrogen-progesterone combinations collectively known as "the pill" have, on balance, been the greatest single boon that chemistry has ever conferred upon womankind. Their deficiencies have also been widely publicized and are generally well-known. Despite these deficiencies, most have been able to take "birth control pills" for prolonged periods with no visible ill effects.

Accordingly, when a woman appears in the doctor's office complaining of dysmenorrhea, amenorrhea or oligomenorrhea, or of any manner of menstrual irregularity, there is a very great tendency to give her a prescription for birth control pills. This accomplishes several things. It gives her a regular flow which is small, relatively painless and predictable. Moreover, the patient feels assured that she will not conceive while she continues to take the pills, and the doctor advises her that the pills will regulate her periods. The patient then supposes that when she comes off the pills, her periods will return to normal.

Unfortunately, prolonged administration of contraceptive steroids will frequently result in prolonged ovarian suppression. The patient does not understand that her periods are not being regulated at all, but rather suppressed. Moreover, the exact duration of this suppression may be totally unpredictable. This is just the opposite of what many women have come to believe; that "pills" will "regulate" their periods, and eventually, enhance their fertility. Injudicious use of contraceptive steroids may result in very unpleasant consequences, as these cases will demonstrate:

Case 1: An 18-year-old mullipara was slightly obese and slightly hirsute. She had progressive oligomenorrhea. She was given a prescription for contraceptive steroids, which she took regularly for two years. Following this time, she stopped the medication, and thereafter did not menstruate for over two years. Appropriate endocrine studies revealed the presence of an acquired adrenogenital syndrome.

Case 2: A 21-year-old mullipara entered the office complaining of infertility. At the age of 16, she had consulted another physician, stating that her periods occurred only every three or four months. For the next three years, she took her pills on a regular basis and enjoyed regular "menstruation". However, she married at the age of 19, and one year later stopped her pills and began attempting to conceive. However, after stopping her pills, the patient failed to menstruate, much less conceive, for one full year. Subsequent studies revealed a polycystic ovarian syndrome, and clomiphene therapy was required before ovulation could be made to occur.

In summary, it is fallacious to advise a woman that birth control pills will regulate her periods and enhance her fertility. Even a normally menstruating woman may suffer prolonged anovulation following prolonged exhibition of contraceptive steroids. It is most important to make an endocrine diagnosis before giving pills to "regulate the periods", something they simply do *not* do.

Every doctor is familiar with the woman aged from 40 to 60, who enters the office with a long list of complaints (often written on a slip of paper held in the hand). To listen to most of these complaints sympathetically would tax the patience of a saint. Moreover, the patient frequently has a menstrual problem, in that her periods have become irregular, a little too often, a little too heavy, with perhaps a bit of spotting in-between. The temptation to ascribe all of the patient's ills to the menopause is almost irresistible. Very often, these ladies leave the office with a prescription for estrogen tablets or birth control pills in their hand.

...it's just the menopause...

However, it is a good general principle *never to administer hormones without a tissue diagnosis.* Although, in most cases, the patient is indeed suffering from a minor degree of ovarian failure, which in turn causes the irregularity, her bleeding *may* be due to a carcinoma or a submuccous myoma. Ideally, a D & C should be done, but failing this, a Gravlee jet wash, endometrial biopsy with a Novak suction curet, or a Vabra aspiration may be done. It takes but a few moments to obtain a tissue specimen, and the occasional carcinoma that is found will make the effort well worthwhile. Moreover, hormone therapy given to a person who already has hyper-estrogenism may merely exaggerate the bleeding. Two cases will illustrate this point.

Case 1: A 45-year-old woman entered the office complaining of irregular menses. She had been treated by two other physicians with hormone shots, with no relief of symptoms. Pelvic examination was ostensibly normal, but endometrial biopsy revealed a well-differentiated adenocarcinoma of the uterus, which was subsequently treated with radiation and surgery.

Case 2: A 50-year-old woman complained of severe hot flashes and missing her periods. She had been treated with hormone pills and had begun to have irregular spotting. At this juncture, her physician had increased her hormone dosage, with no effect upon her spotting. Endometrial biopsy was performed, and showed adenomatous hyperplasia of the endometrium, a lesion widely regarded as precancerous. This diagnosis was confirmed by D & C, and subsequently, a hysterectomy was performed.

In summary, it only takes a moment to obtain a tissue specimen, which may save the patient's life. A good general principle, in fact, is never to give hormone therapy without a tissue diagnosis, even if the previous menses have been "normal".

Dean's Report

William R. Willard, M.D., Dean
College of Community Health Sciences
University of Alabama

The College of Community Health Sciences, based at the campus of The University of Alabama at Tuscaloosa, is part of The University of Alabama System Medical Education Program, developing a coordinate program with the School of Medicine at Birmingham and the School of Primary Medical Care at Huntsville. It is also beginning cooperative efforts with the University of South Alabama and the University of Mississippi Schools of Medicine.

Some basic facts may be of interest:

Planning Began in June, 1972

Staff as of July 10, 1975:

Professional Staff

Full-time	19
Part-time	5
Voluntary	96
Supporting Paid Staff	45
Residents in Training	17

Medical Students—Fifty-two medical students have spent one or more months of their clinical training at the College since its inception. Up to 25 junior and 25 senior medical students are projected within two or three years.

The College of Community Health Sciences at The University of Alabama was created to help the State meet its serious and growing need for modern health care. The people, especially those in the smaller towns, rural and underserved areas—but not limited to these—perceive this problem as one of a physician shortage. Alabama is, in fact, short of physicians by any comparative figures with the nation as a whole or with most other states. However, with expansion of enrollment at the School of Medicine, University of Alabama, the shortage in the number of physicians should be overcome before too many years pass, provided we can hold a majority of the graduates of these schools in Alabama. Because a physician tends to practice in the region where he obtains his residency training, Alabama must establish many new first-rate residency programs because it now has available only about half the places that will be needed during the 1980's by the graduates of Alabama medical schools. *This is an urgent priority need.*

More critical than a lack of physicians is their geographic distribution and the lack of balance between primary care physicians (family physicians) and other specialists. Hence, the first and most important mission of the College of Community Health Sciences has been to establish a viable family practice residency and to decentralize, insofar as possible, medical educational opportunities in areas which can support training programs or provide good preceptorships.

This problem is more complex, however, than just having enough family physicians properly distributed throughout the state. A number of patients will need the services of specialists, and there are many support and ancillary services such as hospital facilities, laboratory, x-ray, nutrition, physical therapy and others required for good medical care. In addition, there are many special health problems such as alcoholism, maternal and child health, rehabilitation, mental health, public health and social services which require special resources. Every county has some of these resources, but few, if any, counties have enough of them. The problem is complicated by the fragmentation of services among numerous agencies and the fact that many physicians are not aware of their availability or potential availability.

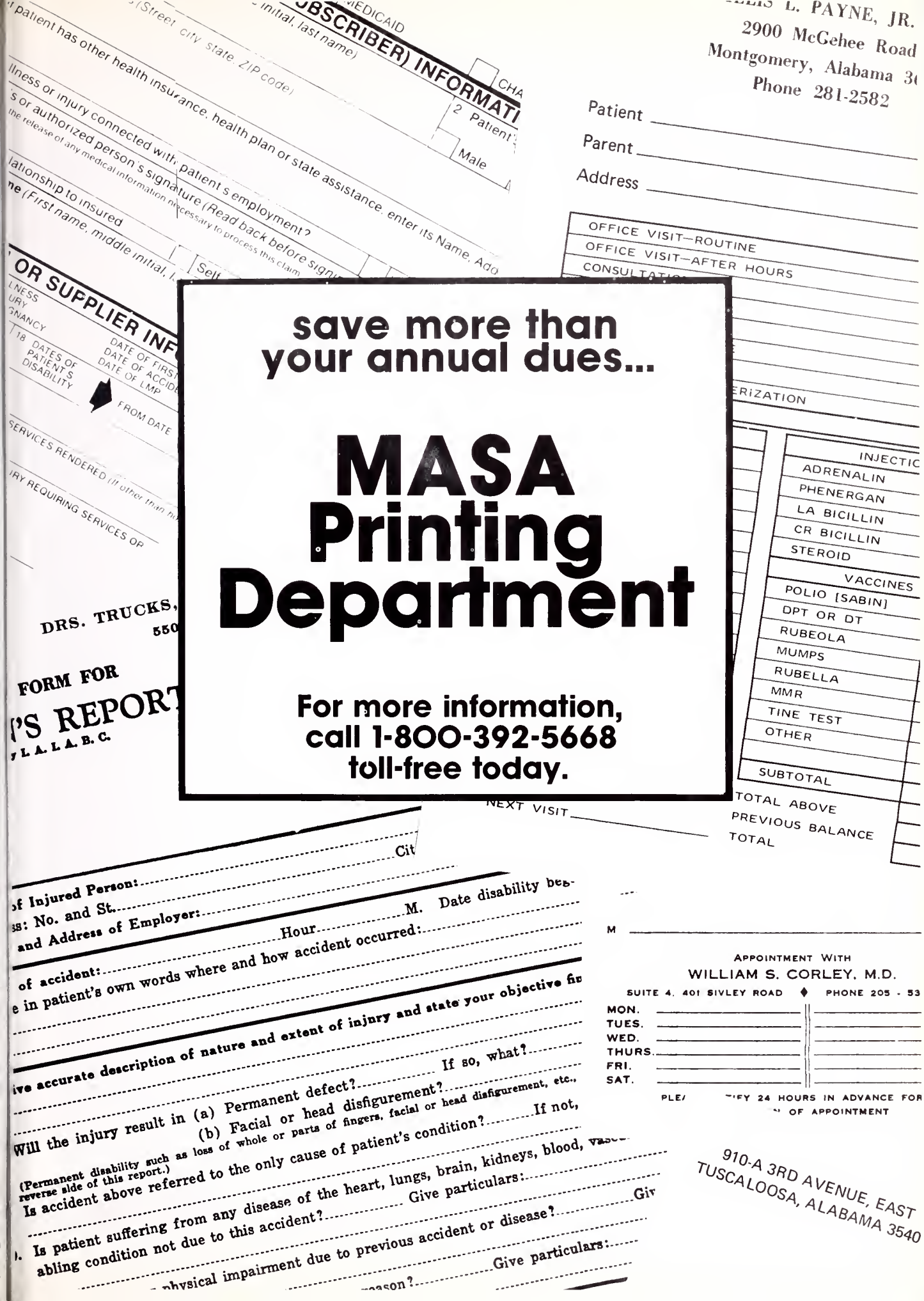
Thus, the delivery of comprehensive health care is more than a physician problem. It is an organizational problem to marshall all available resources, private, local, State and Federal. To achieve this is the responsibility not just of physicians but of the community as a whole. However, physicians should, and indeed must, take the leadership in the organizational task. This approach calls for looking at the problems of the community as a whole, *not just at the problem of individual patients.*

Furthermore, there are many communities that can never hope to acquire a physician in residence because they are so small and their area is sparsely populated, or there are unforeseeable environmental problems. There is an often-quoted statement that roads and communications are now so good and everyone has a car that he can go to a larger town for care. This is just not true in many case; in any event, it will not satisfy the demands of the people. It seems obvious that by appropriate planning and organization, the physicians in the larger towns (and some small towns with groups of doctors) can provide services by satellite or primary care centers for these areas. They may need to recruit more physicians to do this – some of the coming graduates of the Tuscaloosa and Huntsville residency programs or from other programs.

It is essential for physicians to look at the whole region where they practice and to ensure that services are available to all the people; it is no longer sufficient for a physician to content himself with caring for just those patients who come to him voluntarily or by referral if private practice and free enterprise is to prevail in medicine. This, too, is a matter of organization, because no one physician can solve the problem alone. The College of Community Health Sciences is willing to help, when asked, in this organizational problem.

Community medicine calls upon many disciplines, and inevitably becomes involved in organization, administration, legislative, economic, social and other problems with

Continued on Page 50


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Dr. Lyman Hall
of Georgia

"Out of the hills of Habersham,
Down the valleys of Hall,
I hurry amain to reach the plain,
Run the rapid and leap the fall,
Split at the rock and together again,
Accept my bed, or narrow or wide,
And flee from folly on every side
With a lover's pain to attain the plain
Far from the hills of Habersham,
Far from the valleys of Hall."

SIDNEY LANIER—
"THE SONG OF THE CHATTAHOOCHEE"

On May 20, 1776, John Adams noted in his Autobiography that "Lyman Hall . . . . appears as a delegate from Georgia, intelligent and spirited, making a powerful addition to our phalanx."

This was a critical timal in the affairs of the Continental Congress. The powderkeg was primed for an ensuing explosion which was to completely separate the 13 original colonies from "His Britannic Majesty" and all of the English realm. The Continental Congress was prepared to finalize the declaration of their independence. Representatives from the colonies had been selected to serve in the Congress. Dr. Lyman Hall was one such man.

He had worked long and untiringly to have Georgia represented in the Continental Congress. Born in Connecticut in 1724, he studied for the ministry at Yale College and graduated in 1747. However, this choice of career did not work out for him and he entered the practice of medicine.

Dr. Hall and his wife moved to the colony of Georgia and settled in the Sunbury community on the coast, where he established himself in practice in 1752.

At the outbreak of the Revolutionary War, the majority of the people in Georgia were loyal followers of the King and opposed to patriotic movement; but St. John's Parish decided to elect Hall to represent them in the Continental Congress in Philadelphia, even though the rest of Georgia sent no delegates.

Hall presented his credentials to Congress on May 13, 1775, and was permitted to take a seat as a representative of St. John's Parish. Because each colony had only a single vote in the Continental Congress, and because Hall represented only a small portion of Georgia rather than the entire colony, he agreed to give up any voting rights and merely take part in the debtates.

The example Hall set for Georgia helped cause its provincial congress meeting in July, 1775, to elect a delegation, including Hall, to represent the entire colony in Congress. Hall was re-elected in 1776 and signed the Declaration of Independence with most of the other colonial delegates on August 2, 1776, including fellow physicians Josiah Bartlett and Matthew Thornton, both of New Hampshire, and Benjamin Rush, of Pennsylvania.

When the British occupied Georgia after the capture of Savannah, Hall was forced to move his family to the North. He had to sacrifice his medical practice and also suffered

Continued on Page 65

The MUDRANES

Discreet formulations of four well regarded drugs for the relief of bronchial distress—Potassium Iodide, Glyceryl Guaiacolate, Aminophylline, Ephedrine with Phenobarbital (to lessen cardiac stimulation).



INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23261

the sun and solar keratosis...

Over-exposed



and often underdiagnosed

Solar keratosis is not an uncommon medical problem.

Of course, the prevalence of keratotic lesions is greater in locations south of the 38th parallel—the so-called "Solar Keratosis Belt"—receiving the greatest amounts of solar radiation. However, solar keratosis can occur among any light-skinned population, usually in persons over 40, wherever people are subject to extended exposure to the sun.

Solar keratoses are generally not difficult to identify.

These skin lesions are usually multiple, flat or slightly elevated, brownish or red in color, papular, dry, rough, adherent and sharply defined. They are found on areas of the skin having extensive exposure to sunlight. Clinical characteristics of the lesions, their predominant location on exposed surfaces, the age of the patient and his skin type are important considerations in the diagnosis.

Solar keratoses can, and should, be treated because they are potentially premalignant.

Chronic exposure to sunlight frequently leads to degenerative changes in the skin. This can often result in the development of multiple, potentially premalignant keratotic lesions. Therefore, early detection and treatment is advisable.

Treatment with Efudex (fluorouracil) provides a high degree of effectiveness with a low recurrence rate, ease and convenience of therapy, low incidence of scarring, excellent cosmetic results in most cases, and a high level of patient acceptability.

Efudex® 5% Cream
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Because there may be more than meets the eye.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris (hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

ROCHE

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Nutley, New Jersey 07110

Case history for patient photographed at left on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

Dean's Report

Continued from Page 44

their attendant disciplines. The young physician must know how to use and relate to these disciplines in order to help mobilize and use the resources necessary to serve the region.

Although there are many ways in which physicians can organize to deliver health care, it is clear that the modern family physicians will be the front line troops in most of the smaller towns and underserved areas. Hopefully, they will work in small groups supported by appropriate specialists as members of the group.

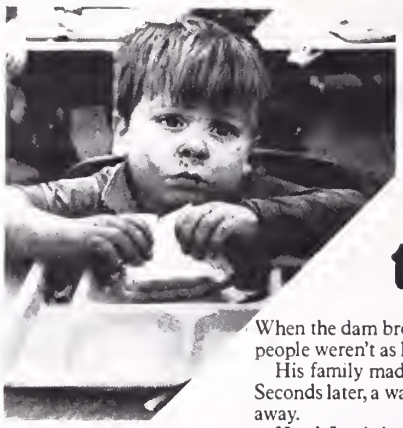
The College of Community Health Sciences in no sense intends to deemphasize the scientific training in medicine and to turn out inferior personal physicians; instead, it is adding the new dimensions of family practice and community medicine. It is already training medical students and family practice residents and working with a number of communities throughout Alabama such as West Blocton, Gordo, Fayette and Selma in an effort to solve critical problems in health care and to develop off-campus programs suitable for the clinical education of physicians and allied health workers.

The College literally is still in the developmental period. Its ultimate success is dependent upon its continued growth, its financial support by the State and the medical profession, and its continuing clear commitment to the objectives and philosophy which underlies its development.

CONTINUING MEDICAL EDUCATION ANSWERS

1.	D	6.	A
2.	E	7.	D
3.	B	8.	B
4.	A	9.	C
5.	C	10.	C

NEXT QUIZ: CARDIOVASCULAR DISEASE



Would you help this kid?

When the dam broke at Buffalo Creek, a lot of people weren't as lucky as Jamie Mosley.

His family made it up the hill just in time. Seconds later, a wall of water swept everything away.

Here's Jamie in the Red Cross Shelter, thinking it all over. One look at that face, and we're awfully glad we were there to help.

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Southern Medical Association 69th Annual Scientific Meeting

Miami Beach, Florida—Hotel Fontainebleau Nov. 16-19, 1975

We could draw pretty word pictures about Miami—the scintillating beaches, the glamorous hotels, the superb cuisine, the intriguing spots to visit, the unequaled vacationland—but we won't. You'll have to find out for yourself.

But we will tell you about the most exciting scientific medical meeting of the year – the 69th Annual Scientific Meeting of the Southern Medical Association – featuring a wide range of symposia, 22 sections, live teaching demonstrations, learning center, postgraduate courses, closed-circuit television—something for every specialty.

The Continuing Education Program of the Southern Medical Association has been granted full approval by the American Medical Association's Council of Medical Education.

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Make your plans now while reservations are available. Write: Southern Medical Association, 2601 Highland Avenue, Birmingham, Alabama 35205.

Around The State

NEW MEMBERS

LOWNDES COUNTY

SEGALL, Nathan, b 47, mc Ala. 73, recip. La. 537 Ponce deLeon, Montgomery 36105.

MOBILE COUNTY

OAKS, Walter Allen, b 41, mc Ala. 67, sb 68, 1720 Springhill Ave., Mobile 36604. R.

POND, Harry Searing, III., b 39, mc Tennessee 63, recip. NBME 64, No. 4 Kingsway, Mobile. 36608. U.

SUTTON, George Stevens, b 40, mc Emory 65, recip. Ga. 65, 231 Shelton Beach Rd., Saraland. 36571. GP.

MONTGOMERY COUNTY

NOBLIN, William Earl, III., b 38, mc Mississippi 62, recip. Miss. 62, 2119 E. South Blvd., Montgomery. 36111. PL.

TUSCALOOSA COUNTY

RUBEN, Elizabeth Fern Richardson, b 35, mc Rochester 60, recip. Ill. 61, 1501 Dearing Place, Tuscaloosa. 35401. GP.

RUBEN, Ethan Baruch, b 37, mc Ill. 60, recip. Ill. 62, 1501 Dearing Place, Tuscaloosa. 35401. S-Pd.

CHANGES OF ADDRESS

CHAMBERS COUNTY

MCCRORY, Ellann, present Langdale, to 1408 Alabama Ave., S. W., Fort Payne, Ala. 35967.

JEFFERSON COUNTY

CHASTAIN, Truman L., present Birmingham, to 7916 2nd Ave. S., Birmingham, 35206.

OBERMAN, Albert, present Birmingham, to P. O. Box 10566, Birmingham, Ala. 35296.

REID, Joel W., present Birmingham, to P. O. Box 2727, Birmingham, Ala. 35202.

SINIARD, Emmett C., present Birmingham, to 2794 Montevallo Rd., Birmingham, Ala. 35233.

JEFFERSON COUNTY

TYLER, Richard E., present Birmingham to 3020 Briarcliff Road, Birmingham, Ala., 35223.

WOODMAN, Thomas D., present Bessemer, to P. O. Box 688, Bessemer, Ala. 35020

MADISON COUNTY

SPARKS, James E., present Huntsville, to University of Alabama School of Medical Care, Huntsville, Ala. 35807.

MOBILE COUNTY

HOGAN, Walter L., Jr., present Mobile, to 15 Midtown Park West, Mobile, Ala. 36606. SHEPARD, Jerome, present Mobile, to P. O. Box 7391, Mobile, Ala. 36607.

MONTGOMERY COUNTY

CHAMBLESS, William H., present Montgomery, to 3968 Governors Dr., Montgomery. 36111.

PICKENS COUNTY

DOUGLAS, George C., present Tallassee, to Rt. 4, Box 70-6C, Canyon Rd., Wetumpka, Ala. 36092.

TUSCALOOSA COUNTY

COLLIER, James P., present Tuscaloosa, to 2291 Flintlock Drive, Stone Mountain, Ga. 30083.

HALE, Ernest E., Jr., present Tuscaloosa, to 910 A 3rd. Ave. East, Tuscaloosa, 35401.

KING, Gordon H., present Tuscaloosa, to 910 A 3rd Ave. East, Tuscaloosa, Ala. 35401.

NEW TELEPHONE NUMBERS

BYRD, Ben R., Houston 794-3192
DREWRY, William F., Jr., Houston 794-3192
DUNHAM, William K., Jr., Conecuh 578-2480
NOBLIN, William E., III., Montgomery 284-0290
OAKS, Walter A., Mobile 432-2626
POND, Harry S., Ill., Mobile 342-4699
POPE, David H., Houston 794-3194
ROBESON, James A., Houston 794-3194
RUBEN, Elizabeth F. R., Tuscaloosa 345-0198
RUBEN, Ethan B., Tuscaloosa 345-0198
SEGALL, Nathan, Lowndes 265-6490
SINIARD, Emmett C., Jefferson 870-5950
SUGG, Joseph H., Houston 794-3192
SUTTON, George S., Mobile 675-2677
WELLS, Benjamin B., Jefferson 979-0986

MEMBERS REINSTATED

CONECUH COUNTY

DUNHAM, William King, Jr., b 42, mc Ala. 68, recip. NBME 69, P. O. Box 189, Evergreen. 36401. Or.

ELMORE COUNTY

ANGLE, David Lee, b 30, mc Ala. 59, sb 59, 105 Sims Ave., Tallassee. 36078. S.

JEFFERSON COUNTY

FOFT, John William., b 28, mc Nebraska 54, recip Nebraska 54, UAB-School of Medicine., University Station., Birmingham. 35294. Path.

WELLS, Benjamin Baxter, b 12, mc Baylor 35, recip Texas 35, 2659 Swiss Lane, Birmingham, Ala. 35226. CP.

MACON COUNTY

HAMLETT, Mary Kline, b 37, mc Ala. 67, sb 68, Lakeshore Clinic, P. A., Tuskegee, Ala. 36083. GP.

MEMBERS DECEASED

HOUSTON COUNTY

PRUITT, Elihu Posey, III., Dothan . . . . Deceased 5/1/75

LEE COUNTY

SCHULTZ, Frank Bernard, Auburn . . Deceased 5/13/75

TUSCALOOSA COUNTY

PARTLOW, Rufus C., Tuscaloosa . . . . . Deceased

NECROLOGY



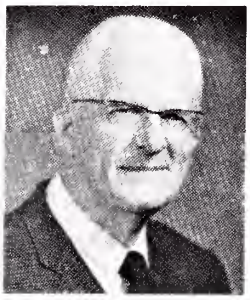
DR. CIRCLE



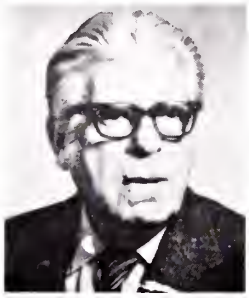
DR. COLVIN



DR. DAVIS



DR. MASON



DR. SCHULTZ

Alan Lee Circle, M.D.
1942-1975

A Radiologist at Radiology Associates of Birmingham, Dr. Circle died May 31, 1975. A resident of Birmingham for only two years, Dr. Circle graduated from Yale University in 1967. He came to Birmingham following his residency at the Milwaukee County General Hospital.

He served on hospital staffs at St. Vincent's, Brookwood and Children's hospitals in Birmingham.

Gus W. Colvin, M.D.
1899-1975

A native of Alabama, Eureka, Dr. Colvin passed away on April 22, 1975, following a brief illness. He was still actively engaged in his practice in Lincoln until two weeks before his death.

Known as "Dr. Gus", he completed medical school at Tulane and interned at Mercy Hospital, New Orleans. He began his practice in 1928 with his father, Dr. J. P. Colvin. His memberships include the American College of Surgeons, the AMA, MASA and the Talladega County Medical Society.

He is survived by his wife, Mrs. Evelyn Colvin, two daughters and a son.

Sumner D. Davis, M.D.
1910-1975

Dr. Davis, 64, passed away June 19, at Baroness Erlanger Hospital, Chattanooga, after an extended illness. He had been actively practicing in Talladega for 39 years.

A graduate of the University of Penn. Medical School, Dr. Davis was on the staff at Citizens' Hospital and was active in the Alabama Chapter, AAFP. During World War II, he was stationed in the Pacific and earned both the Bronze Star and the Purple Heart.

Survivors include his wife, Geraldine Davis, one son and two daughters.

James M. Mason, III, M.D.
1907-1975

Dr. Mason, prominent Birmingham Surgeon, died Saturday, May 24, at his home. He was 67 years of age.

A native of Birmingham, he was Chief of Surgical Services at St. Vincent's Hospital, Professor of Surgery, UAB School of Medicine and Chief Surgeon for Alabama Power Company.

Dr. Mason received his M.D. degree from John Hopkins where he also served his internship and residency. He was heavily decorated for Army medical service during World War II, participating in the Allied Invasions of Sicily, Salerno and Anzio.

He is survived by his wife, Mrs. Gladys Mason, a son and two daughters.

F. Bernard Schultz, M.D.
1900—1975

A native of Buffalo, New York, Dr. Schultz received his M.D. Degree from Georgetown University in Washington, D.C., in 1935. He entered private practice in Internal Medicine from 1937 to 1941 in Falls Church, Virginia, and private practice in Cardiology in Hawaii from 1947 to 1953.

He moved to Alabama in 1953 where he began his practice in Auburn and served there until his death. During this period, he served in many capacities with the Lee County Hospital, Opelika, and the VA Hospitals in Montgomery and Tuskegee.

Dr. Schultz served as Governor of the American College of Cardiology of Alabama and was the author of more than 20 medical publications. In addition to his position as Chief, Cardiology Section at the Tuskegee VA Hospital, he also served as Director of Education for the Medical Service. He is survived by his wife, one daughter and one granddaughter.

Necrology

A RESOLUTION

WHEREAS, Dr. Cecil Eugene Price died on April 29, 1974, and

WHEREAS, Dr. Cecil Eugene Price was engaged in the practice of medicine in this County and City for over a period of twenty years, and

WHEREAS, Dr. Cecil Eugene Price gave unselfishly of his time and talents to his patients without regard to said patients' station in life, and

WHEREAS, Dr. Cecil Eugene Price was exemplary of humanitarian traits, and

WHEREAS, the loss of Dr. Cecil Eugene Price is regretted by all, both friends and patients,

NOW, THEREFORE, IT IS RESOLVED, by the County of Conecuh, through its Commission, that August 10, 1975, be and hereby is designated Dr. Cecil Eugene Price Memorial Day in memory of Dr. Cecil Eugene Price, deceased.

Be it further RESOLVED that a copy of this Resolution be spread upon the minutes and a copy be sent to Mrs. Louise R. Price and the Medical Association of the State of Alabama.

Alabama First With Health Department Coverage

Alabama became the first state in the nation (1937) to have all of its counties covered on an individual basis with county health departments for health services and clinics. The first county health department was organized in 1914 in Walker County by Dr. Carl A. Grote, Sr.

Southeastern Internal Medicine Specialists To Meet Sept. 12-13

Specialists in internal medicine will hold a two-day scientific meeting on Sept. 12-13, 1975, at the Grand Hotel, Point Clear, Ala.

The Southeastern Regional Meeting of the American College of Physicians (ACP) is designed to bring physicians up-to-date on late developments in the field of internal medicine. The states involved are Alabama, Georgia, Louisiana, Mississippi and South Carolina.

Physicians who attend the regional meeting are eligible for credit toward the American Medical Association Physicians Recognition Award in Category No. 1. In charge of arrangements for the Southeastern Regional Meeting is Thomas N. James, M.D., F.A.C.P., Birmingham, who serves as the ACP's representative in Alabama.

Federal Tax Dates For September

9. Semi-monthly excise taxes deposit due (IRS Form 504). (See January 9).

15. Third quarter installment of 1975 estimated tax due from individuals on calendar year basis. Amended declaration (IRS Form 1040-ES) may be filed at this time. (See April 15).

15. Deposit of third quarterly installment of estimated 1975 corporation income tax. Amount to be paid is 25% of estimated tax; if the requirements for the deposit are first met after May and before September 1, 50% of the estimated tax must be deposited. (See IRS Form 1120W). Deposit of fiscal year corporation due by 15th day of 9th month of fiscal year.

24. Semi-monthly excise taxes deposit due (IRS Form 504). (See January 9).

30. Monthly Excise Taxes deposit due (IRS Form 504).

The parents were angry when she was hired. Now they're glad she took the job.



The President's Committee on Employment of the Handicapped
The School of Visual Arts Public Advertising System

Auxiliary

Martha Hughes
President



It seems that only a few days ago the Alabama delegation was together in Atlantic City for the AMA convention. Not only were our delegates present, but, we in Alabama are blessed with ladies who serve on a national level, helping to swell our number at national meetings, also. Mrs. John Chenault (Belle), from Decatur is a past national president, and very active these days as secretary for the AMPAC board. At the convention, Belle reported that two AMPAC workshops have been held this year, and praise be to Alabama, we were one of the two. Of course, since we are at the head of the list, the rest will soon follow.

Mrs. Howard Johnson, of Sheffield, is another one of our girls on the national scene. Not only did we stay at the world's largest Howard Johnson's motel, but Alabama ranked up at the top for AMA-ERF donations for the nation. Carmille is the southern regional chairman for this job, and we in Alabama are proud of the job that she and her co-workers are doing for the South.

Mrs. Ben Johnson, Ruth, of Bessemer, serves on the national board as a member of the most vital committee of all – communications. Ruth has spread "Southern Hospitality" over many states this year as she has appeared on many sister states' programs during their meetings.

Along with these ladies, our regular delegates were Mrs. George Scofield of Birmingham, Mrs. Marcus Whitman of Helena, Mrs. Lewis Young of Bessemer, Mrs. William Smith of Montgomery, and the state president, Mrs. William Hughes of Montgomery. We were also represented by Mrs. Robert Wilson of Aliceville, who served as an alternate delegate.

Several items of interest were brought before the House of Delegates. As a result of the voting concerning these items, a raise in national dues of $3.00 will go into effect next year. This is certainly in line with the cost of inflation, and I believe the people of Alabama will be agreeable to this.

A change of name was introduced, voted on and passed. We will now be known as **The American Medical Association Auxiliary.** No longer will we be listed at the bottom of the list, but will take a place up with the A's where we belong.

A new design was introduced for the national seal. After much discussion, this was voted down. Instead, auxiliary members may submit designs using the rectangular shape that has been used over the years. How proud we will be if an Alabama artist comes up with the winning design.

All of the auxiliary members attending the national convention were inspired and motivated to do more and to learn how to participate in all the areas of medicine we are involved. Becoming interested and being a worker in our own community is the best place to start.

September 24 is the date set for the district board meeting for the northwest district. The meeting will take place at the Joe Wheeler State Resort. All doctor's wives and husbands will be contacted to attend.

Dr. Mathews Confirmed As Secretary Of HEW



Dr. Mathews

Dr. F. David Mathews, confirmed by the United States Senate as the new Secretary of Health, Education, and Welfare, was sworn in Friday, August 8, in Washington. The Senate acted by voice vote in unanimously approving President Ford's nomination of Mathews, who will now become the youngest member of Ford's cabinet. He will be responsible for a national monolithic bureaucracy which boasts a payroll of 149,000 employees and accounts for annual expenditures of $110 billion, one-third of the Federal budget.

Alabama physicians, and their collegues everywhere, wish to express their sincere congratulations to Dr. Mathews, as he seeks to lead a department which in recent years has found itself in a seemingly unsolvable quagmire of social and budgetary problems. His leadership capabilities have been describedmost succinctly by Senate Republican leader, Hugh Scott, when he said upon Mathews' confirmation that he found him "to be realistic and compassionate in his understanding of the many problems with which the Department has to deal."

A native of Grove Hill, Dr. Mathews received his Bachelor's and Master's degrees from the University of Alabama (Phi Beta Kappa graduate) and his Doctorate in History of American Education from Columbia University. Dr. Mathews served as an administrator and teacher at the University from 1960 until his appointment as President in 1969. It was during his service as a member of the Advisory Council of the American Revolution Bicentennial Administration that he first came to the attention of President Ford.

Dr. Mathews has assumed a yeoman's assignment. The road does not promise to be easy. However, he will not have to walk it alone. The Board of Trustees at the University, the Alabama Legislature, Alabama citizens everywhere and members of the U.S. Senate have honored him with their confidence and admiration. The medical profession is proud to recognize Dr. Mathews' appointment with a pledge of unified support and unceasing desire to work with him for the promulgation of health care programs which by their very nature will be in the best interests of all our citizens.

New Physicians Licensed To Practice In Alabama



Kim, Machiko Kono, M.D., Tokyo Women's Medical College, 1958, Reciprocity with Kentucky. Specialty: Anesthesiology.



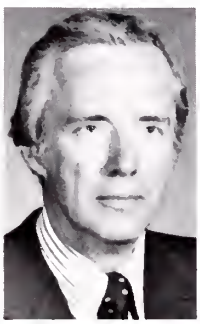
Chi, Pei-Cheng, M.D., National Defense Medical College (Taiwan), 1960, Reciprocity with Georgia. Specialty: Anesthesiology.



Farrow, James Gregory, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Kneller, Sheldon, M.D., Albert Einstein College of Medicine, 1968. Reciprocity with National Board of Medical Examiners. Specialty: General Surgery.



Connelly, David Meckel, M.D., Temple University Medical School, 1954, Reciprocity with Delaware. Specialty: Plastic Surgery.



Heald, David Grant, M.D., University of Alabama School of Medicine, 1974, Reciprocity with Georgia (FLEX).



McDonald, Clyde Colvin, M.D., LSU School of Medicine, 1967, Reciprocity with Louisiana. Specialty: General Surgery.



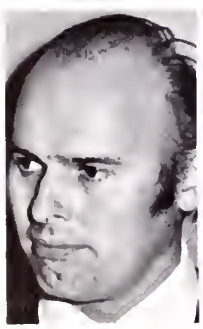
Curry, Rupert Charles, Jr., M.D., University of Florida College of Medicine, 1969, Reciprocity with Florida. Specialty: Cardiology and Internal Medicine.



Hull, Richard Porterfield, M.D., University of Mississippi School of Medicine, 1971, Reciprocity with Mississippi. Specialty: Neurology.



Middleton, Malcolm David, M.D., University of London School of Medicine, 1964, Reciprocity with Virginia (FLEX).



Erdmann, Welhelm, M.D., University of Mainz (Germany), 1964, (Limited 152).



Khan, Khalid Latif Punhoon, M.D., University of Punjab (Pakistan), 1968, Reciprocity with Missouri. Specialty: Ophthalmology.



Patterson, George Wayne, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.

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BY LARRY DIXON

Continuing Medical Education

INFECTIOUS DISEASE AND ALLERGY

DIRECTIONS: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one that is BEST in each case.

1. A 23-year-old woman was admitted to the hospital with a two-day history of fever and repeated episodes of chills and pain in the right ankle and left wrist. Two weeks earlier she had a severe sore throat for which she received lincomycin (Lincocin) for four days. On examination, her temperature was 38.9 C (102.0F) and her pusle rate was 120/min. Her left wrist was erythematous, exquisitely tender, and swollen from the mid-dorsum of the hand to the midforearm. Her ankle was only questionably swollen. Laboratory studies disclosed an elevated anti-streptolysin O titer (600 Todd units); Gram stain of a smear of cervical secretions revealed gram-negative intracellular diplococci.
   Which of the following statements concerning this woman's illness is correct?
   (A) An elevated antistreptolysin O titer may occur as a cross-reaction with gonococcal infections.
   (B) Since she has received lincomycin, it is unlikely that this condition now represents gonococcal arthritis.
   (C) The appearance of painful swelling of the right knee 36 hr. after being started on penicillin (600,000 units every 6 hr) would not be surprising if she had acute gonococcal arthritis.
   (D) Both the occurrence and multiple recurrence of shaking chills and striking tenosynovitis would be unusual in acute rhematic fever.
   (E) Acute gonococcal tenosynovitis is often associated with a positive test for rheumatoid factors.

2. A 16-year-old boy took an overnight hike into the Great Smokey Mountains. Upon his return home ten days later, and four days prior to being seen by a physician, he suddenly developed fever with chills, headache and generalized myalgia. On the day of admission to the hospital, he noted an erythematous macular eruption over the dorsal surface of his hands and arms. Examination disclosed edema of the eyes and lower extremities fever and evidence of disorientation.
   Which of the following would be the most appropriate therapeutic regimen?
   (A) Methicillin, 6 gm/day, intravenously
   (B) Ampicillin, 2 gm/day, orally
   (C) Penicillin G, 20 million units/day, intravenously
   (D) Sulfisoxazole (Gantrisin), 6 gm/day, intravenously
   (E) Chloramphenicol, 3 gm/day, intravenously

3. Which of the following may be found in a patient with chronic mucocutaneous candidiasis?
   (A) Absent serum complement activity
   (B) Hypocalcemia
   (C) Decreased serum growth hormone
   (D) Recurrent bouts of herpes zoster
   (E) Elevated plasma cortisol levels

4. A 45-year-old construction worker is seen by a physician one hour after mangling his arm in a cement mixer. He had his last tetanus toxoid booster 20 years ago.
   Which of the following would be most appropriate at this point?
   (A) Administer a tetanus toxoid booster
   (B) Administer tetanus immune human gamma globulin, 500 units.
   (C) Administer equine anititoxin, 50,000 units
   (D) Since he had received a booster 20 years ago, there is no need for an additional booster; administer penicillin G, 600,000 units twice/day, to prevent Group A streptococcal infection.
   (E) Administer methicillin, 12 gm/day, intravenously, to prevent straphylococcal infection.

5. A 35-year-old man was in good health until about 10 days prior to being seen by a physician, when he felt generally poor, developed a fever with a temperature of 38.1 (100.6F) and noted a vesicular lesion on the dorsum of one hand. Over the next two to three days, it became a brown, crusted lesion. He remained well for about one week and then noted generalized malaise for 24 hr. This was followed the next day by the appearance of a vesicular rash, primarily on the trunk and a temperature of 38.3 C (101.0 F) for which he sought medical attention.
   Which of the following is the most likely diagnosis?
   (A) Pityriasis rosea
   (B) Varicella
   (C) Rickettsialpox
   (D) Coxsackie virus infection
   (E) Herpes Zoster

6. A 60-year-old man, whose routine annual physician examination six months ago disclosed no abnormalities, developed a slight hemiparesis and an expressive aphasia. Examination on admission disclosed a temperature evaluation and a grade 3/6 basal diastolic murmur, in addition to the neurological signs. Cerebrospinal fluid examination showed 60 lymphocytes/cu mm and a normal glucose content. Twenty-four hours later three blood cultures were reported to contain gram-positive cocci.

Which of the following would be the most appropriate therapeutic regimen?

(A) Oxacillin (Prostaphlin), 12 gm/day, intravenously
(B) Ampicillin, 6 gm/day, orally
(C) Tetracycline, 2 gm/day, intravenously
(D) Sulfisoxazole (Gantrisin), 6 gm/day, intravenously
(E) Chloramphenicol, 3 gm/day, intravenously

7. A 38-year-old lawyer had had low-grade fever and malaise for two weeks and had been given erythromycin 250 mg four times/day, for the past three days without clinical improvement. As a teenager he had had acute rheumatic fever and was known to have murmurs of mitral stenosis and mitral insufficiency. One month ago he had an impacted third molar extracted because of caries; he received penicillin orally the day before, the day of, and for two days after the extraction. Examination discloses a temperature of 38.4 C (101.2 F) and murmurs of mitral stenosis and mitral insufficiency. No splinter or subungual hemorrhages, petechiae or Osler's nodes were observed and the spleen was not palpable.

Which of the following would be most appropriate at this point?

(A) Continue the erythromycin, since three days is too early to anticipate a response
(B) Discontinue the erythromycin, obtain six blood cultures, and immediately administer penicillin, 10 million units/day and streptomycin 1.0 gm/day
(C) Discontinue the erythromycin, obtain six blood cultures, and immediately administer penicillin, 10 million units/day
(D) Discontinue the erythromycin and after 24 hr without medication, obtain six blood cultures
(E) Do a liver biopsy to look for granulomas as evidence of septic emboli

8. Which of the following antibiotics should be given in increased dosage when administered parenterally to patients receiving peritoneal dialysis?

(A) Chloramphenicol
(B) Kanamycin
(C) Colistimethate (Coly-Mycin)
(D) Tetracycline
(E) Polymyxin B

9. In an attempt to minimize undesired side effects in patients receiving substantial doses of adrenal corticosteroids (equivalent to 30 to 40 mg of prednisone/day), a schedule of a single morning, alternate-day dose has been used.

Studies of patients who have received this dosage for periods longer than one year have shown

(A) no evidence of posterior subcapsular opacities
(B) only minimal evidence of facial fullness, weight gain and hypertension, but definite impairment of growth curves.
(C) essentially normal ability to respond to stress as measured by an increase in plasma cortisol levels after intravenously administered insulin
(D) Approximately the same degree of suppression of delayed hypersensitivity as have patients who have received daily divided doses of corticosteriods
(E) no improvement in adrenal responsiveness if they had previously been on a daily divided dose schedule.

10. A 13-year-old boy from Virginia developed fever with a temperature of up to 40.0 C (104.0 F), severe headache and mental confusion. An erythematous macular rash that blanched on pressure appeared three days after the onset of his illness. He was admitted to the hospital for treatment. For the next 24 hr. the temperature remained elevated reaching as high as 40.0 C (104.0 F). Headache and confusion persisted. The rash became petechial and purpuric and spread over the entire trunk and extremities, involving the palms and soles. All of his muscles were very tender. His neck was moderately stiff. Leukocyte count was 14,000/cum mm with a shift to the left; platelet count was 30,000/cu mm. Cerebrospinal fluid examination disclosed no abnormalities.

The most likely diagnosis is

(A) meningococcal meningitis
(B) tuberculosis
(C) Rocky Mountain spotted fever
(D) staphylococcal bacteremia
(E) Brill-Zinsser disease

(ANSWERS ON PAGE 50)

Leukemia Grant Applications

Applications for grants to support research aimed at finding a control or cure for leukemia are now available from the Leukemia Society of America, Inc.

The Society, a national health agency supported by voluntary contributions, offers three types of funding programs for post-doctoral medical scientists who are working in the fields of leukemia and related disorders of the blood-forming organs. The programs are:

Scholarships—$100,000 grants for five-year periods for investigators who have demonstrated distinct ability in leukemia research.

Special Fellowships—$31,000 grants for two-year periods for investigators who have demonstrated ability in leukemia research and whose qualifications place them between Scholar and Fellow status.

Fellowships—$25,000 grants for two-year periods for promising younger investigators to encourage their work in leukemia research.

October 1, 1975 is the deadline for submitting completed applications to the Society. Proposals will be reviewed in January, 1976 with approved grants to become effective the following July. Candidates need not be American citizens and there are no restrictions as to age, race, sex or creed.

Application forms may be obtained by writing to Dr. Rose Ruth Ellison, Vice President for Medical and Scientific Affairs, Leukemia Society of America, Inc., 211 East 43rd Street, New York, New York 10017.

ANNOUNCING! AMA'S REGIONAL CONTINUING MEDICAL EDUCATION PROGRAM



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This Regional meeting presented by AMA's Council on Scientific Assembly in cooperation with Eastern Virginia Medical College, University of Virginia Medical School, The Medical College of Virginia, and the Medical Society of Virginia, will consist of eight postgraduate courses:*

1. Human Sexuality
2. Office Gynecology
3. Basic Electrocardiography
4. Pulmonary Function and Blood Gases
5. Fluid and Electrolyte Balance
6. Infectious Diseases and Antibiotics
7. Dermatology for Non-Dermatologists
8. Basic and Advanced Life Support — Cardiopulmonary Resuscitation (CPR)

*Courses 1 through 7 are 6 hours each; each is presented twice (once on Saturday, once on Sunday); and each costs $60. Course No. 8 is a 12-hour course that runs both days and cost $120.

For more information **WRITE:**

Dept. of Circulation & Records/AMA, 535 N. Dearborn St./ Chicago, IL 60610

CALL (312) 751-6187 for immediate details by return mail

Digest of Actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at July 16 meeting of The State Board of Censors:

1. Approved Financial Statement for period ending June 30, 1975, showing receipts of $29,284.52 and disbursements of $265,536.53.
2. Approved request of Dr. Chestley Yelton, Chairman, Liaison Committee, regarding Accreditation Manual for Hospitals published by the Joint Commission on Accreditation of Hospitals.
3. Approved request for endorsement of Medic Alert bracelets by Mr. R. J. Cunningham, Executive Vice President, Alabama Association of Life Underwriters.
4. Received as information Quarterly Report of Council on Medical Service.
5. Recommended that problem such as treatment of a patient by a physician for a possibly pre-existing condition be referred to the Liaison Committee to Blue Cross-Blue Shield. If the Liaison Committee cannot resolve the problem, then the procedure would be to appeal to the Peer Review Committee; then to the Board of Censors if a solution cannot be reached.
6. Recommended that development of guidelines for use by physicians for restricting driving privileges relating to certain disabilities be referred to the Medical Advisory Board, Department of Public Safety.
7. Approved request for endorsement of EMS workshops to upgrade emergency medical services personnel in rural physician shortage areas, as requested, by the State Department of Education.
8. Received as information Quarterly Report of Interspecialty Council.
9. Received as information Quarterly Report of Council on Medical Education.
10. Received as information Quarterly Report of Council on Public Affairs.
11. Received as information Quarterly Report of Council on Legislation.
12. Approved legislation of Alabama Academy of Family Physicians which would create a Joint Advisory Board of Family Practice, pending a favorable report of Legislative Council.
13. Received as information report of the Legal Department.
14. Approved Hale, Crenshaw and Marshall County Medical Society Constitutions.
15. Recommended that Mr. Mooresmith travel to Wausau, Wisconsin, to confer with Employers of Wausau's Legal Department regarding Alabama Medical Liability Act.
16. Received as information Quarterly Report of Council on Socio-Economics.
17. Appointed Drs. H. H. Hutchinson and J. J. Kirschenfeld to the Hospital Service for Indigent Advisory Board.
18. Appointed J. Richard Moore, M.D., Mobile, to the Advisory Board to the University of Alabama School of Medicine, to succeed James G. Donald, M.D., deceased.
19. Approved request from Pickens County for National Health Service Corps physician.
20. Recommended that the Chairman and Mr. Mooresmith attend the professional liability conference co-hosted by AMA and American Hospital Association.

Digest of Actions of the State Committee of Public Health

Herewith is presented a Digest of Actions taken at the July 16 meeting of the State Committee of Public Health:

1. Held joint meeting with the Emergency Medical Services Advisory Board for legal hearing on the proposed revision of EMS Rules, Regulations and Standards.
2. Conducted hearing for Eliza Coffee Memorial Hospital 24-hour Emergency Room Physician Project with Appalachian Health Demonstration Funding in the amount of $90,000; returned request to 314(a) Agency without recommendation.
3. Approved request for Federal funding for the West Alabama Health Services, Inc., for expansion into Sumter County with a Health Service Center.
4. Disapproved Lowndes County Health Services application for $544,603 in Rural Community Health System 314(e) funds.
5. Noted designation of HSA Areas has been transmitted by the Governor to the HEW Secretary with one change: a shift of DeKalb County from the North Alabama District to District 4. (Designation of areas would otherwise remain the same as previously recommended, including a separate designation for Tuscaloosa District and return of Russell County to Alabama as a matter of state's rights.)
6. Approved request for Appalachian funding for Northeast Alabama District Health Demonstration Project proposal.
7. Recommended the Licensure Advisory Board changing the following facilities from Regular to Temporary licenses: Beasley Nursing Home, Fairhope; Cogburn Nursing Home, Inc., Mobile; and Oakridge Nursing Home, Eight Mile.
8. Approved appointment of John D. Rayfield, M.D., as Health Officer of Talladega County, without pay, effective July 2, 1975.
9. Approved appointment of Billy D. McAnnally, M.D., as Quarantine Officer in Calhoun County.
10. Denied change in the Master Hospital Plan for Houston, Morgan and Dale Counties.
11. Approved revisions of Procedures Manual for the 1122 Program and requested revision of the regulations to permit other changes of the Procedures Manual not presently allowed by HEW Legal Counsel.

Continued on Page 64



Upjohn

ON THE FRONTIERS OF DIABETIC RESEARCH...

What is Diabetes?

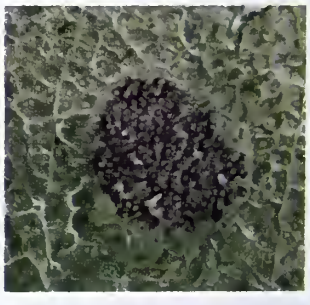
Although a medical scribe of ancient Egypt first made reference to diabetes mellitus in man, today, nearly 4000 years later, only meager specific knowledge exists as to the basic cause of the disease. Without such knowledge it has been possible to provide for limited control only *after* diabetes manifests itself in the form of elevated blood glucose. The possibility of prevention or even cure of diabetes, however, must depend on a full understanding of the genetic defect and/or defects underlying the disease. Our current understanding of diabetes may be compared to our former understanding of another disease of metabolic abnormality, phenylketonuria; only when the genetic lesion of that disease was discovered did it become possible to institute current programs of treatment.

Basic Diabetes Research at Upjohn

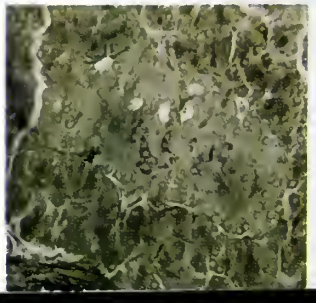
For more than ten years the Diabetes and Atherosclerosis Research Group at The Upjohn Company (W. E. Dulin, Director; G. C. Gerritsen; M. G. Soret; A. Y. Chang) has addressed itself, in a series of unique experiments, to the very basic question: What is diabetes? As with all such fundamental research, practical results are slow in coming and the work of the Group has at times raised more questions than it has been able to answer. It appears now, however, that the research is moving toward important conclusions which may, over the next several years, have significant bearing on our understanding of diabetes and, hopefully, on our ability to control it.

The Chinese Hamsters

In the middle fifties, a group studying cytogenetics in Chinese hamsters at the Children's Hospital Medical Center, Boston, Massachusetts, discovered that certain hamsters develop diabetes spontaneously. The Upjohn Research Group obtained some of these hamsters in 1962, and by controlled inbreeding, succeeded over the years in producing large numbers of diabetic animals for study. To assure continuity of the research in the event of a catastrophe, duplicate breeding stock of all the inbred families are maintained at another site. These are the only such colonies in the United States today. In the course of the research, Upjohn has cooperated with scientists in academic



Normal Chinese hamster, pancreatic tissue. Note blue-stained insulin granules which appear within the beta cells of the islet of Langerhans.



Diabetic Chinese hamster, pancreatic tissue. Insulin granules are almost totally absent. Though beta cells are present, there is some degranulization and vacuolization. The diabetic process is similar to that observed in human pancreatic tissue.

centers, both in America and abroad, in various specialized studies. When possible, these scientists have come to work for a time in Upjohn laboratories. In other cases, specially selected hamsters were transported to outside research facilities.

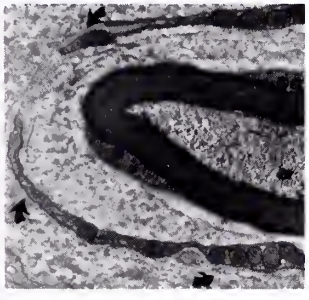
Closer to Man

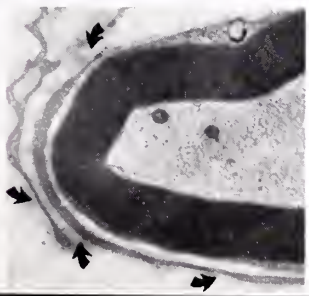
While other species besides man develop diabetes spontaneously, the Chinese hamster appears to be the best laboratory animal model to study, since its disease is remarkably similar to diabetes in man. Chinese hamster diabetes, like human diabetes, is a complex disease. Like humans, the hamsters have more than one variety of diabetes, including the juvenile, insulin-dependent type as well as the maturity-onset type. They also develop pathological lesions in the retina, kidney, and peripheral nerves, as do human diabetics.

Diabetes is as complicated genetically in hamsters as it is in man. The type and severity of the disease appears to vary with the number of genes involved. Fortunately, genetic analysis can progress faster in the hamster since two or three generations can be produced per year.

Hamsters with Diabetic Genes Overeat

Perhaps one of the most significant observations is that hamsters with diabetic genes have significantly increased food consumption prior to development of clinical signs of diabetes. Further, if the animal with diabetic genes were limited to a normal amount of food, onset of diabetes could be delayed and reduced in severity, and the animal could have a normal life span of 34-35 months. Those animals that develop the clinical symptoms have a shorter life span, which varies with the severity of the disease. Interestingly, decreases in the incidence of human diabetes were noted during the siege of Paris in 1870, and during and immediately after World War II in Europe. It has been postulated that decreased food intake during these periods may have delayed the onset of the disease or reduced its severity to a point where hyperglycemia did not appear.





Peripheral diabetic neuropathy. Top photo, Chinese hamster; bottom photo, 58-year-old diabetic man. The encirclement of myelinated nerve fibers by thin Schwann cell processes, indicated by arrows, is a cellular reaction to chronic demyelination, and is a characteristic finding in this condition in both man and the Chinese hamster.

Implications for the Future

The purpose of the Upjohn Research Group is to attempt, through its work with the Chinese hamsters, to find the basic genetic lesion or lesions associated with diabetes. Such knowledge could provide the information necessary to predict the disease in humans, to define its exact mode of inheritance, and to initiate studies aimed at correcting the defect or defects. Hopefully, it will eventually be possible to devise methods to prevent the development of the abnormalities associated with the disease, if the defect or defects can be corrected. Such methods may replace all treatment in use today.

Already, a beginning has been made in the establishment of programs to apply the information gained from the hamster research. The Upjohn Group is currently working with pediatric endocrinologists in an attempt to define the genetics of human diabetes and to confirm retrospectively whether the discoveries concerning dietary manipulation in genetically diabetic hamsters can be applied to humans. Should the results of these investigations be positive, and if it becomes possible through further work with the hamsters to identify prediabetic humans before they develop signs of the disease, an enormous stride will have been made. Even though the investment in this research is made with no guarantee, this risk must be undertaken.

Note: For bibliography of published papers, please write to W. E. Dulin, PhD, Upjohn Diabetes and Atherosclerosis Research Group, 7241-25-9, Kalamazoo, Michigan 49001.

DEDICATED TO HEALTH CARE

Meeting mankind's health needs is a primary commitment of The Upjohn Company. This commitment is fulfilled not only through the production of today's pharmaceuticals, but even more importantly, through a continuing dedication to research and development of programs directed at discovery of the therapy and therapeutic approaches of the future.

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Kalamazoo, Michigan 49001

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DIGEST OF ACTIONS

Continued from Page 61

12. Approved seven initial certificates of Assurances of Need.
13. Approved Assurance of Need applications for: Burns Nursing Home, Russellville, 27 beds; UAB-Research Unit Diabetes Research and Education; Memorial Manor Multiple Care Center, Prattville, 40 beds; UAB-East Base and Bed Towers, Birmingham, 159 beds.
14. Approved a proposed bill to implement State Health Planning and Development Agency required under P.L. 93-641.
15. Approved allocation of hospital beds for treatment of indigent tuberculosis patients in facilities no longer maintained as free-standing tubercular hospitals: Lanier Memorial Hospital, Shawmut, 3 beds; Cooper Green Hospital, Birmingham, 15 beds; Eliza Coffee Memorial Hospital, Florence, 3 beds; Mobile General Hospital, Mobile, 10 beds; Flowers Hospital, Dothan, 2 beds.
16. Appointed Title XIX Medical Care Advisory Committee: Gerald G. Woodruff, Jr., M.D., Chairman; Mr. Frank Perryman, Vice Chairman; Alan R. Dimick, M.D.; Reverend Steven D. Rice; Everett L. Strandell, M.D.; Roy Adams, O.D.; Ms. June Gordon.
17. Approved Medicaid Plan Amendment extending services to 1,700 children in foster homes or private child care institutions with matching funds provided by Department of Pensions and Security in order to utilize Federal matching.
18. Received final Disaster Project Report and noted assignment of Tom Chester, M.D., Assistant State Epidemiologist from the Center for Disease Control, effective August, 1975.

DEPARTMENT OF CONFIDENCE

A recent survey in the U.S. found public confidence at these levels:

In Congress	18%
In lawyers	18%
In news media	25%
In physicians	50%



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DR. LYMAN HALL OF GEORGIA

Signer Of The Declaration Of Independence

confiscation of his property, including his rice plantation, by the enemy.

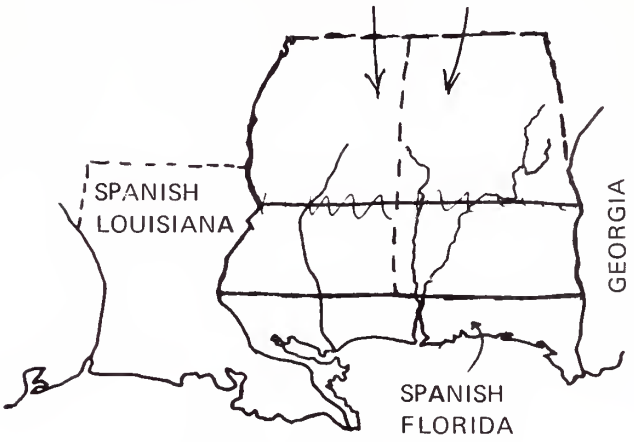
In 1782 he returned to Georgia, before the evacuation of Savannah, and he was elected governor of Georgia the following year. Withdrawing later from public life, he settled in Burke County, where he died in 1790.

When Georgia as a whole sent representatives to Congress, colonies became unanimous in their opposition to British oppression. In recognition of Dr. Hall's contribution to freedom, a Georgia county, established later, was named for him. His remains are buried in Augusta, Georgia, where a monument was built to his memory.

REFERENCES

1. Famous Signers of The Declaration, Dorothy Horton McGee, Dodd, Mead & Co., New York, 1966.
2. Founders of Freedom in America, Vol. 1, American Freedom Library, J. G. Ferguson Publishing Co., Chicago, 1971.

CEDED TO ENGLAND BY FRANCE IN 1763
AND TO U.S. BY ENGLAND IN 1783



LAND WEST OF GEORGIA IN 1776
(Crown lands reserved for Indians but claimed in part by Colonies eastward.)

Alabama Department Of Public Health
BUREAU OF PREVENTABLE DISEASES
FREDERICK S. WOLF, M.D., DIRECTOR

CURRENT MORBIDITY STATISTICS

1975	June	July	*E.E. July
Tuberculosis	72	69	111
Syphilis	34	43	48
Gonorrhea	1,898	2,595	870
Chancroid	0	0	0
Typhoid fever	1	0	0
Salmonella	29	24	28
Undulant fever	1	0	0
Shigella	22	11	6
Amebic dysentery	0	0	0
Scarlet fever & strep. throat	366	283	363
Diphtheria	0	0	0
Whooping cough	0	4	6
Meningitis	10	23	10
Tularemia	0	0	0
Tetanus	0	1	0
Poliomyelitis	0	0	0
Encephalitis	2	0	1
Smallpox	0	0	0
Measles	0	0	5
German measles	1	1	5
Chickenpox	72	4	11
Mumps	45	16	33
Hepatitis	39	57	25
Typhus fever	0	0	0
Rocky Mt. spotted fever	0	3	2
Malaria	0	1	0
Rheumatic fever	112	2	6
Rheumatic heart	14	4	16
Influenza	8	15	22
Pneumonia	197	206	219
Rabies - Human cases	0	0	0
Pos. animal heads	1	1	0

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*E.E.—The estimated expectancy represents the median incidence of the past nine years.


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ALABAMA PHYSICIAN
SEPTEMBER 1975

JOURNAL of the Medical Association of the State of ALABAMA

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Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



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2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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The JOURNAL

of the

Medical Association of the State of Alabama

VOLUME 45, NUMBER 3 SEPTEMBER 1975

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price $12.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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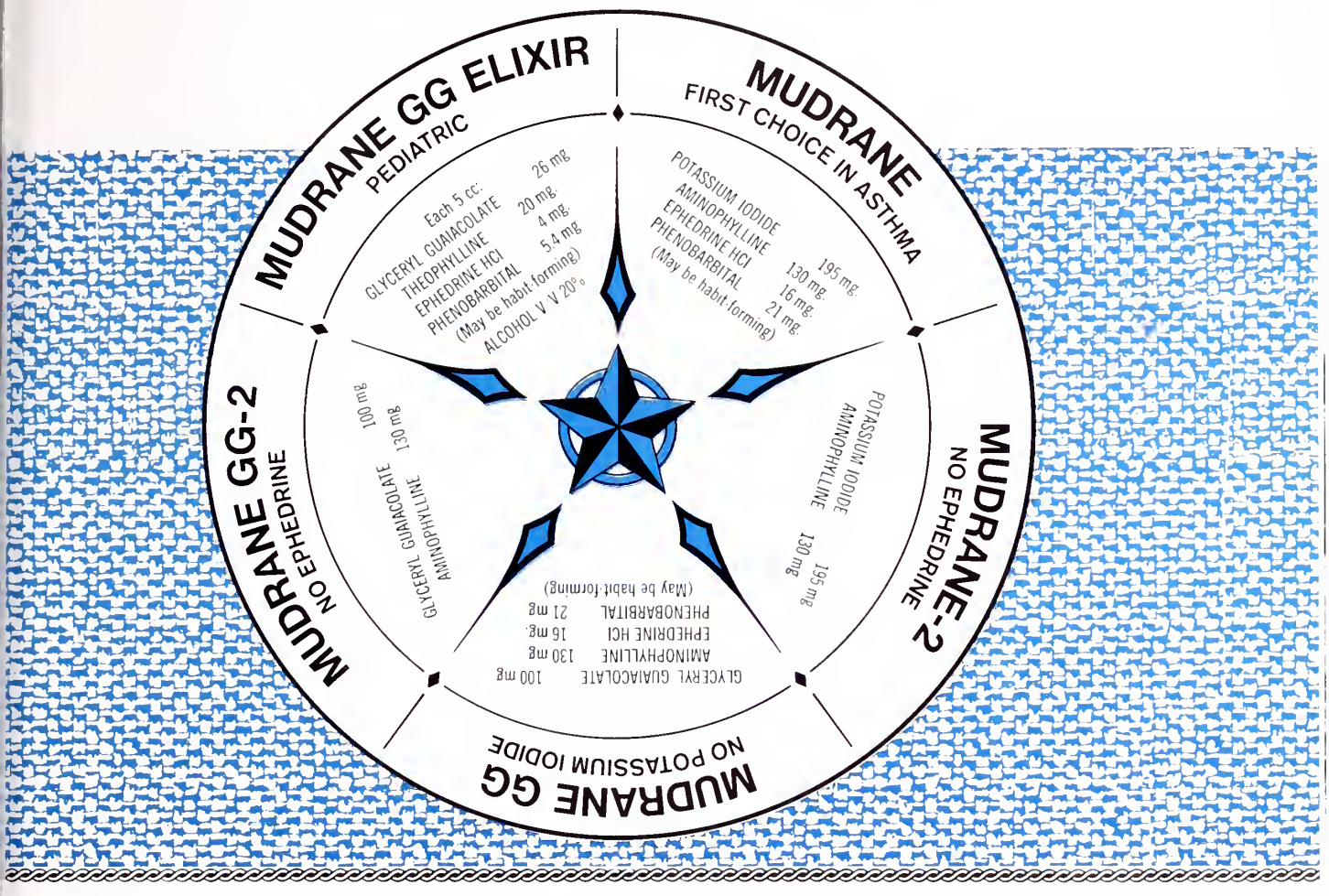
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Discreet formulations of four well regarded drugs for the relief of bronchial distress—Potassium Iodide, Glyceryl Guaiacolate, Aminophylline, Ephedrine with Phenobarbital (to lessen cardiac stimulation).



INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23261



The Medical Association of the State of Alabama, in its constant endeavor to increase benefits to its members, offers many programs and is constantly searching for more.

For example, an ad hoc committee of the Board of Censors is now engaged in a study of a computerized patients billing system, operated under a state-wide franchise, and designed to relieve the major bookkeeping burden from the offices of our members.

Other beneficial programs have been well publicized in previous issues of the *Journal*.

***

Becoming more popular each year are MASA's travel adventure programs which have taken our members and their families to all points of the world.

Almost 2,000 passengers have been transported by airliner and luxury ships since our first program was offered in the Fall of 1968. This was a simple little junket to Las Vegas, Honolulu and San Francisco—a one-week affair with about 80 passengers.

Contrast this to our 1975 Summer adventure which took 250 persons into the heartland of Europe for a cruise down the Rhine River. At least 40 additional persons were booked too late.

A Mediterranean cruise in August of 1974 also attracted a capacity load of 250 passengers and was overbooked weeks before the deadline.

Considerably more than 200 passengers have enjoyed and extolled the pleasure trips to Majorca, off the Coast of Spain (June, 1970); London (June, 1971); Rome (June, 1972); and the Scandinavian countries (June, 1973).

Our winter holidays are also growing in popularity. Several hundred people cruised by luxury liner to Rio de Janeiro in January, 1974, and along the entire eastern coast of South American in January, 1975. About 200 more flew to Hawaii in February, 1972, or cruised the Caribbean area in January, 1973.

Approximately 200 members of MASA and their families will fly to Hawaii this November for a holiday and to attend the Clinical Convention of the American Medical Association. MASA's reservations aboard a 747 were overbooked in short order but the approximate 50 persons on standby have been offered equivalent accomodations.

Continued on Page 12

Rondomycin®
(methacycline HCl)

CONTRAINDICATIONS: Hypersensitivity to any of the tetracyclines.
WARNINGS: Tetracycline usage during tooth development (last half of pregnancy to eight years) may cause permanent tooth discoloration (yellow-gray-brown), which is more common during long-term use but has occurred after repeated short-term courses. Enamel hypoplasia has also been reported. **Tetracyclines should not be used in this age group unless other drugs are not likely to be effective or are contraindicated.**
Usage in pregnancy. (See above **WARNINGS** about use during tooth development.)
Animal studies indicate that tetracyclines cross the placenta and can be toxic to the developing fetus (often related to retardation of skeletal development). Embryotoxicity has also been noted in animals treated early in pregnancy.
Usage in newborns, infants, and children. (See above **WARNINGS** about use during tooth development.)
All tetracyclines form a stable calcium complex in any bone-forming tissue. A decrease in fibula growth rate observed in prematures given oral tetracycline 25 mg/kg every 6 hours was reversible when drug was discontinued.
Tetracyclines are present in milk of lactating women taking tetracyclines.
To avoid excess systemic accumulation and liver toxicity in patients with impaired renal function, reduce usual total dosage and, if therapy is prolonged, consider serum level determinations of drug. The anti-anabolic action of tetracyclines may increase BUN. While not a problem in normal renal function, in patients with significantly impaired function, higher tetracycline serum levels may lead to azotemia, hyperphosphatemia, and acidosis.
Photosensitivity manifested by exaggerated sunburn reaction has occurred with tetracyclines. Patients apt to be exposed to direct sunlight or ultraviolet light should be so advised, and treatment should be discontinued at first evidence of skin erythema.
PRECAUTIONS: If superinfection occurs due to overgrowth of nonsusceptible organisms, including fungi, discontinue antibiotic and start appropriate therapy.
In venereal disease, when coexistent syphilis is suspected, perform darkfield examination before therapy, and serologically test for syphilis monthly for at least four months.
Tetracyclines have been shown to depress plasma prothrombin activity; patients on anticoagulant therapy may require downward adjustment of their anticoagulant dosage.
In long-term therapy, perform periodic organ system evaluations (including blood, renal, hepatic).
Treat all Group A beta-hemolytic streptococcal infections for at least 10 days.
Since bacteriostatic drugs may interfere with the bactericidal action of penicillin, avoid giving tetracycline with penicillin.
ADVERSE REACTIONS: Gastrointestinal (oral and parenteral forms) anorexia, nausea, vomiting, diarrhea, glossitis, dysphagia, enterocolitis, inflammatory lesions (with monilial overgrowth) in the anogenital region.
Skin: maculopapular and erythematous rashes, exfoliative dermatitis (uncommon). Photosensitivity is discussed above (See **WARNINGS**).
Renal toxicity: rise in BUN, apparently dose related (See **WARNINGS**).
Hypersensitivity: urticaria, angioneurotic edema, anaphylaxis, anaphylactoid purpura, pericarditis, exacerbation of systemic lupus erythematosus.
Bulging fontanels, reported in young infants after full therapeutic dosage, have disappeared rapidly when drug was discontinued.
Blood: hemolytic anemia, thrombocytopenia, neutropenia, eosinophilia.
Over prolonged periods, tetracyclines have been reported to produce brown-black microscopic discoloration of thyroid glands, no abnormalities of thyroid function studies are known to occur.
USUAL DOSAGE: Adults—600 mg daily, divided into two or four equally spaced doses. More severe infections: an initial dose of 300 mg followed by 150 mg every six hours or 300 mg every 12 hours. Gonorrhea: In uncomplicated gonorrhea, when penicillin is contraindicated, "Rondomycin" (methacycline HCl) may be used for treating both males and females in the following clinical dosage schedule: 900 mg initially, followed by 300 mg q i d for a total of 5.4 grams.
For treatment of syphilis, when penicillin is contraindicated, a total of 18 to 24 grams of "Rondomycin" (methacycline HCl) in equally divided doses over a period of 10-15 days should be given. Close follow-up, including laboratory tests, is recommended.
Eaton Agent pneumonia: 900 mg daily for six days.
Children—3 to 6 mg/lb/day divided into two to four equally spaced doses.
Therapy should be continued for at least 24-48 hours after symptoms and fever have subsided.
Concomitant therapy: Antacids containing aluminum, calcium or magnesium impair absorption and are contraindicated. Food and some dairy products also interfere. Give drug one hour before or two hours after meals. Pediatric oral dosage forms should not be given with milk formulas and should be given at least one hour prior to feeding.
In patients with renal impairment (see **WARNINGS**), total dosage should be decreased by reducing recommended individual doses or by extending time intervals between doses.
In streptococcal infections, a therapeutic dose should be given for at least 10 days.
SUPPLIED: "Rondomycin" (methacycline HCl), 150 mg and 300 mg capsules; syrup containing 75 mg/5 cc methacycline HCl.

Before prescribing, consult package circular or latest PDR information.

Rev. 6/73

WALLACE LABORATORIES
CRANBURY, NEW JERSEY 08512



When the focus is on bronchitis due to susceptible strains of *H. influenzae* and pneumococci*

Rondomycin® 300 mg. Capsules

[methacycline HCl]

Delivers from the very first dose:

Studies show that after the first dose serum levels rapidly rise above minimum *in vitro* inhibitory concentrations

*Since many strains are known to be resistant, routine sensitivity testing is recommended

the sun and solar keratosis...

Over-exposed



and often underdiagnosed

Solar keratosis is not an uncommon medical problem.

Of course, the prevalence of keratotic lesions is greater in locations south of the 38th parallel—the so-called "Solar Keratosis Belt"—receiving the greatest amounts of solar radiation. However, solar keratosis can occur among any light-skinned population, usually in persons over 40, wherever people are subject to extended exposure to the sun.

Solar keratoses are generally not difficult to identify.

These skin lesions are usually multiple, flat or slightly elevated, brownish or red in color, papular, dry, rough, adherent and sharply defined. They are found on areas of the skin having extensive exposure to sunlight. Clinical characteristics of the lesions, their predominant location on exposed surfaces, the age of the patient and his skin type are important considerations in the diagnosis.

Solar keratoses can, and should, be treated because they are potentially premalignant.

Chronic exposure to sunlight frequently leads to degenerative changes in the skin. This can often result in the development of multiple, potentially premalignant keratotic lesions. Therefore, early detection and treatment is advisable.

Treatment with Efudex (fluorouracil) provides a high degree of effectiveness with a low recurrence rate, ease and convenience of therapy, low incidence of scarring, excellent cosmetic results in most cases, and a high level of patient acceptability.

Efudex® 5% Cream
fluorouracil/Roche®

Because there may be more than meets the eye.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris (hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Case history for patient photographed at left on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

No other Malpractice Insurance Coverage fits the Doctors of Alabama so well . . .

The premium cost you pay for the Wausau Special Malpractice Insurance Policy will be based **only** on Alabama loss experience. So you don't pay to help cover losses in such "claims conscious" areas as Florida (Dade County), New York or California. No other insurance company has consented to these terms. Which is just one of the ways you benefit yourself — and the entire Alabama medical community — when you subscribe to this coverage. For information on additional benefits, contact **MASA Insurance Department, 19 South Jackson Street, Montgomery, Alabama 36104. Or call (800) 392-5668 toll free.**



THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA · 1873 ·

MESSAGE FROM THE PRESIDENT



Hang In There!

E. Vernon Stabler, Sr., M.D.

Benjamin Franklin remarked at one time, "We must all hang together, or assuredly we shall hang separately."

Physicians are highly individualistic, accustomed to making decisions all day long as individuals—so we necessarily resist outside forces or pressures trying to influence our decisions. We can easily say "We will act according to the dictates of our own convictions." However, the loopholes of idealism can become the hangman's noose!

We live in a time when the profession must deal daily with outside forces of great magnitude: the government; insurance companies; the press; the lay public; trial lawyers. All of these exert unified pressure on us.

At a conference table, your representatives must have your support of their negotiations; they need your active involvement in the positions taken.

We must have a position of strength by common convictions if we are to prevail and protect our Association as a whole. These are excellent thoughts suggested by Dr. Hutton, President of the Wyoming Medical Association.

State and local physician groups must take the leadership and speak forcibly and forthrightly in representing their members. An individual doctor must give his ideas and input freely, and then stand behind the decisions of his peers as they negotiate in his behalf.

These are those who would change the medical profession beyond recognition. "A wise man adapts himself to circumstances as water adapts itself to the vessel that contains it."—*(Chinese Proverb.)* "But the water is not changed."—*(Yours Truly.)* The political ploy in this situation is to make sure that the water does not change!

Your officers, legislative committee, insurance committee, Board of Censors, headquarters personnel and many others have worked hard and long on legislation to make a workable legal system in which we can practice medicine freely without fear and with justice to all concerned.

With this in mind, the first bill we proposed, "The Patients' Compensation Act," embodied what we honestly felt was just and fair without special privileges to anyone. The law profession, especially the trial lawyers, objected to limiting provisions. In an attempt at cooperation, we worked out with a special committee, set up by the governor, a substitute bill called "The Governor's Task Force Bill" or "The Medical Liability Act." This was concurred upon by lawyers, Alabama hospital representatives, laymen, Governor Wallace's legal department, etc.

In spite of deletion of several points which we thought rightfully belonged in it, we cooperated and endorsed this bill. Now, however, still others come—a member of the State Bar Association—a member of the Trial Lawyers Association—a legislative representative who is also a lawyer—all feeling that the bill is restrictive in that it limits their returns and the chance at legal results.

Consequently, with a new group formed at the request of the Legislature and attended by trial lawyers, State Bar Association lawyers, the health committee representative, the hospital representative, etc., the third bill—or substitute—has been developed. This bill is accepted by our representative, as well as the hospital association, more lawyer members and other groups. While it does not contain all we would wish, it does contain very important and definite laws which should be established. It would represent a big step forward for the protection of the public and the practicing physician.

This bill seems to have a better chance of being enacted into law; it will be a big help. Certainly, there are times when we would dare to hold out for the whole loaf demanded by our ideal of what is perfect for our medical profession. However, we are at a point in time when it is not only dangerous, but foolhardy to risk ending up with nothing when the alternative, "half loaf" though it may be, shows promise of becoming enriched with a reasonable number of what we consider essential ingredients. I ask that each individual doctor in the State do everything possible to promote its enactment.

In the *Alabama MD* newsletter and *The Journal,* the bill is discussed in detail—carefully read and digest it—then, "hang in there," together, for its passage!

Help stop the tears

of colic, diarrhea or similar malady.



Use i-Soyalac.

i-Soyalac and regular Soyalac are palatable, readily digestible and assimilated. It simulates human milk in appearance, taste and texture. It is complete with vitamins and minerals. It is suitable for infants and children who are sensitive to or cannot tolerate cow's milk.

For nearly a quarter of a century, Soyalac has proven its value in promoting growth and development—as shown by extensive clinical data.

Available in four forms: i-Soyalac Concentrated, Soyalac Concentrated, Soyalac Ready-to-Serve, and Soyalac Powder.



i-Soyalac from isolated protein without corn.

SJ-9

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editorials
editorials

A Time To Reason

Is an open, public and devastating confrontation between the medical and legal professions inevitable? Can men who consider themselves practitioners of sciences which have been defined by law as "learned" (and no other professions are so designated in Alabama) sit down in an atmosphere of mutual respect and harmony to resolve their differences before public opinion declares apox on both their houses?

Doctors need lawyers to the exact same extent that lawyers need doctors. Both are pillars of society—but not the only pillars. Other professions have been astounded by the cleavage which has developed in recent years between the medical and legal communities, primarily as a result of the so-called malpractice crisis.

Apparently heedless of their constant need for expert medical testimony to serve the causes of a host of clients, one segment of the plaintiff's bar has suddenly seized upon medical doctors and their liability insurance underwriters as a golden bonanza. The damage which has been wrought across the length and breadth of this nation cannot be calculated.

Unquestionably the exhalted and time honored practice of medicine has been damaged by the tarnishment of its public image. Most pathetic of all, its victims have been the patients who can't help wondering whether the glaring headlines and outrageous contentions in malpractice bills of complaint could also be applicable to their own physicians whom over the years they have trusted and loved.

The situation which has grown to gargantuan proportions in recent years has affected adversely the legal profession itself and we find it sorely split asunder over the questionable practices and tactics of the plaintiffs' bar. An example of this is the challenge now being made by young attorneys against the outrageous contingency fees and other costs of litigation which have reduced the deserving claimant's award as low as 16 cents out of the judgment dollar.

Manifestly the time has come for physicians and attorneys, men of common sense and good will, to come together for an honest and equitable resolution of the entire medical liability problem. Only through this course of action can they salvage what remains of the high honor and prestige of both professions.

A New Agency In Town

HSA can become a three letter word. Right now it is an acronym for Health Systems Agency, that organization devised by the United States Congress and enacted into law via P.L. 93-641 which is suppose to be the coordinating agency for all health planning in areas containing more than five hundred thousand and less than three million people.

Alabama has six of these Health Service Areas as they are called. The Health Systems Agency which services the area will have complete control of all federal expenditures in the area—this includes Hill-Burton funds, mental health funds, RMP funds, and all other Federal Health grants. National planners estimate that the governing body of a Health Systems Agency will review and decide on over 500 applications for federal funds each year.

There will be a State Agency which will be part of the state government and will be designated by the Governor. The State Health Planning and Development Agency's (SHPDA) governing body will also be pro-consumer and will be made up of individuals nominated from the governing bodies of the Health Systems Agencies. In addition to the required Health Systems Agency representatives on the board, the Governor may, if he wishes, make more appointments to the board as long as he doesn't exceed 40 per cent of the total and he observes the majority consumer aspect of the law.

The Health Systems Agency's governing body will be by law a pro-consumer board. The individuals on that governing body classified as "Providers" will be from positions not generally so classified. A perfect example of this is that in one Health Service Area in this state, those individuals recommended as "Providers" for the HSA's governing body included an independent insurance agent who sells health insurance and a county health department statistician. Once again, "Providers" will make up the minority of the governing body of all six Health Systems Agencies.

The above synopsis of the responsibilities and make-up of the Health Systems Agencies and the manner in which all health planning and funding will be organized in this State and country should provide the physician with enough incentive to use his own initiative to get involved in the development of these agencies at the local level. This is necessary, as the only way in which the physician will be heard and represented, is through some M.D.'s taking the time to help organize at the local level, getting appointed to the governing body of the health systems agencies and then being nominated to the AHPDA's governing body. The authority for all health planning, development, and activity in this state for the years to come will be coming through the governing bodies of the HSA's and the SHPDA.

Immunization Action Month Scheduled For October

As part of a continuing effort to reduce the incidence of childhood diseases and eliminate the threat of widespread epidemics, the U.S. Center for Disease Control has designated October, 1975, as "Immunization Action Month." The goal of the program is to increase the number of children immunized against polio, measles, mumps, rubella, diphtheria, tetanus and pertussis.

IAM 1975 is a continuation of efforts last year and the year before to increase the immunization levels of preschoolers. Survey results indicate that thanks to IAM 1973 and 1974 the ten-year downward trend in immunization levels among children ages one to four has been reversed. In 1973 alone, half a million more children were immunized against preventable disease than were immunized the previous year.

Unfortunately, despite these effective efforts in 1973 and 1974 over five million preschoolers are still unprotected. That's why several major medical organizations have joined CDC in its program to increase the immunity levels among inadequately or unimmunized preschool children. These include the American Academy of Pediatrics, the American Medical Association, the American Academy of Family Physicians, the National Medical Association, the American Osteopathic Association, the American Nurses' Association, and the National League for Nursing.

The U.S. Center for Disease Control will work closely with organized medicine to urge physicians to audit their patient's immunization records in an effort to upgrade immunization levels for children one to four years old.

The IAM program will promote the use of immunization audit techniques through available professional information sources during August and September, 1975.

19 Views

Continued from Page 4

It is especially valuable that these members will be in Honolulu to observe the AMA in action and also to attend the many educational programs which will be offered. MASA's delegates to the AMA have extended a cordial invitation to all visiting physicians from Alabama to participate in their caucuses at which primary problems of organized medicine will be thoroughly reviewed.

***

For those who are curious, the next trip offered will be a nine-day cruise into Alaskan waters aboard one of the most luxurious cruise ships afloat today.

Next month's issue of the *Journal* will bring a detailed announcement of this major event.

For the time being, however, we will only tell you that the trip will depart from Birmingham on June 17, flying chartered United Airlines jet to Vancouver, British Columbia, where our travelers will board the elegant cruise ship, Island Princess.

Remembering all those disappointed people who ended up in a standby status, it may be well to start thinking now about making reservations for this most unique cruise and a first hand view of all the natural beauty of our 49th state.

PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension
Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

One prescription can economically treat the entire family.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
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NSN 6505-00-148-6967

Pinworms, roundworms controlled with a single, non-staining dose of

ANTIMINTH®

(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

*Data on file at Roerig

Please see prescribing information on facing page

durr fillauer

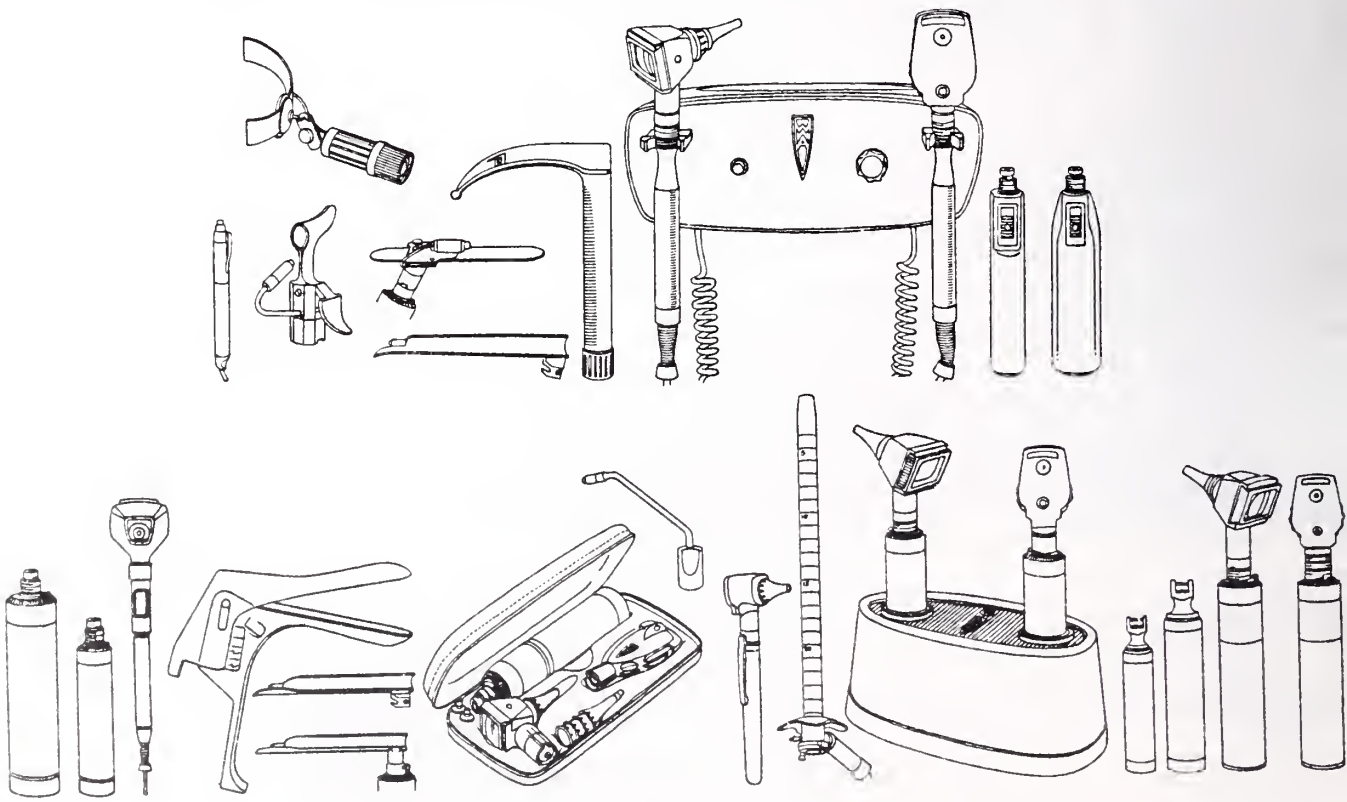
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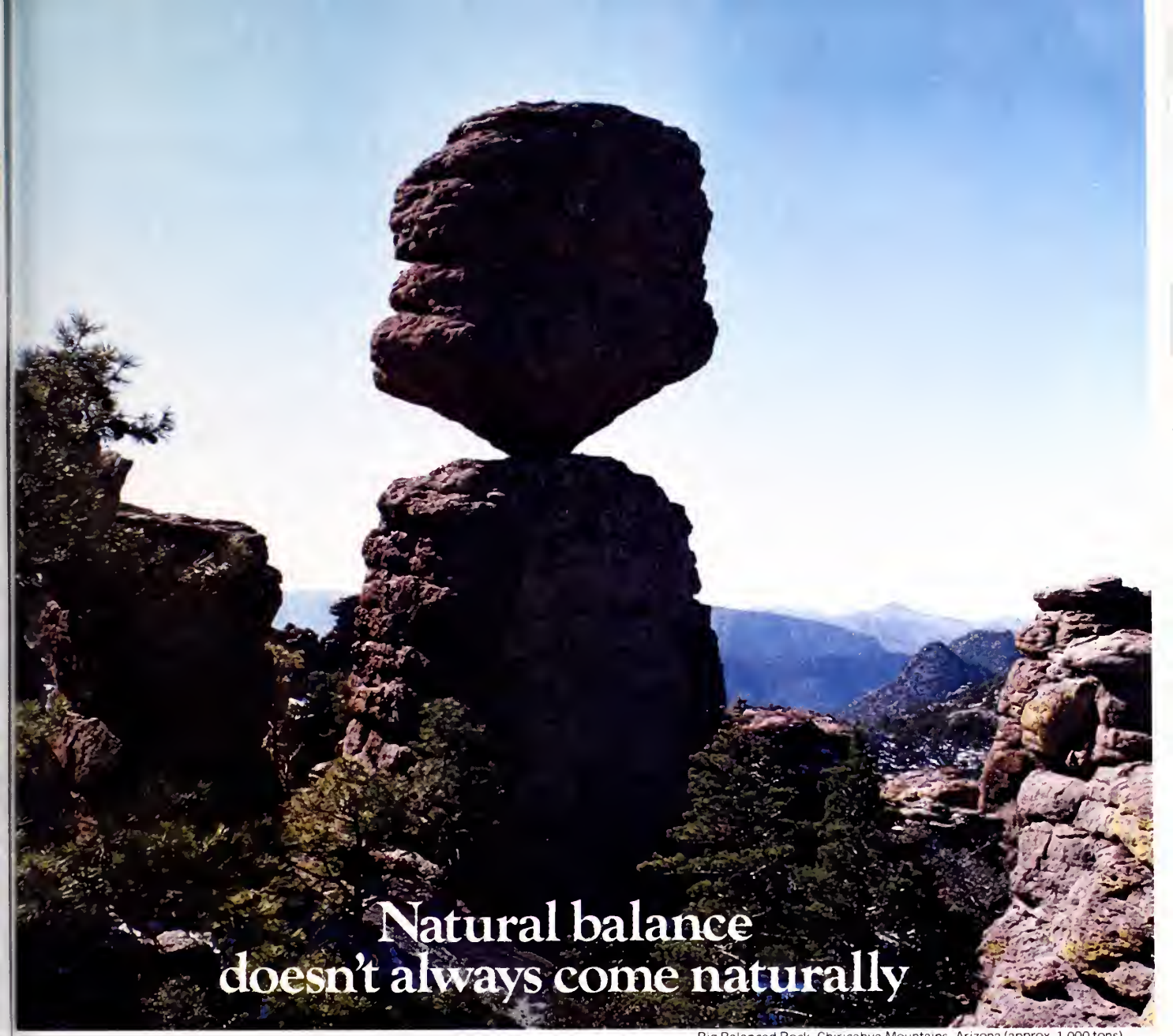
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COMBINE TO OFFER YOU THE FINEST LINE OF DIAGNOSTIC INSTRUMENTS FOR A COMPLETE, ACCURATE DIAGNOSIS



See Your Durr-Fillauer Representative

Mobile Montgomery Birmingham Huntsville



Big Balanced Rock, Chiricahua Mountains, Arizona (approx 1,000 tons)

□ Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
□ Can relieve nausea and vomiting often associated with vertigo.*
□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
□ Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
□ Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

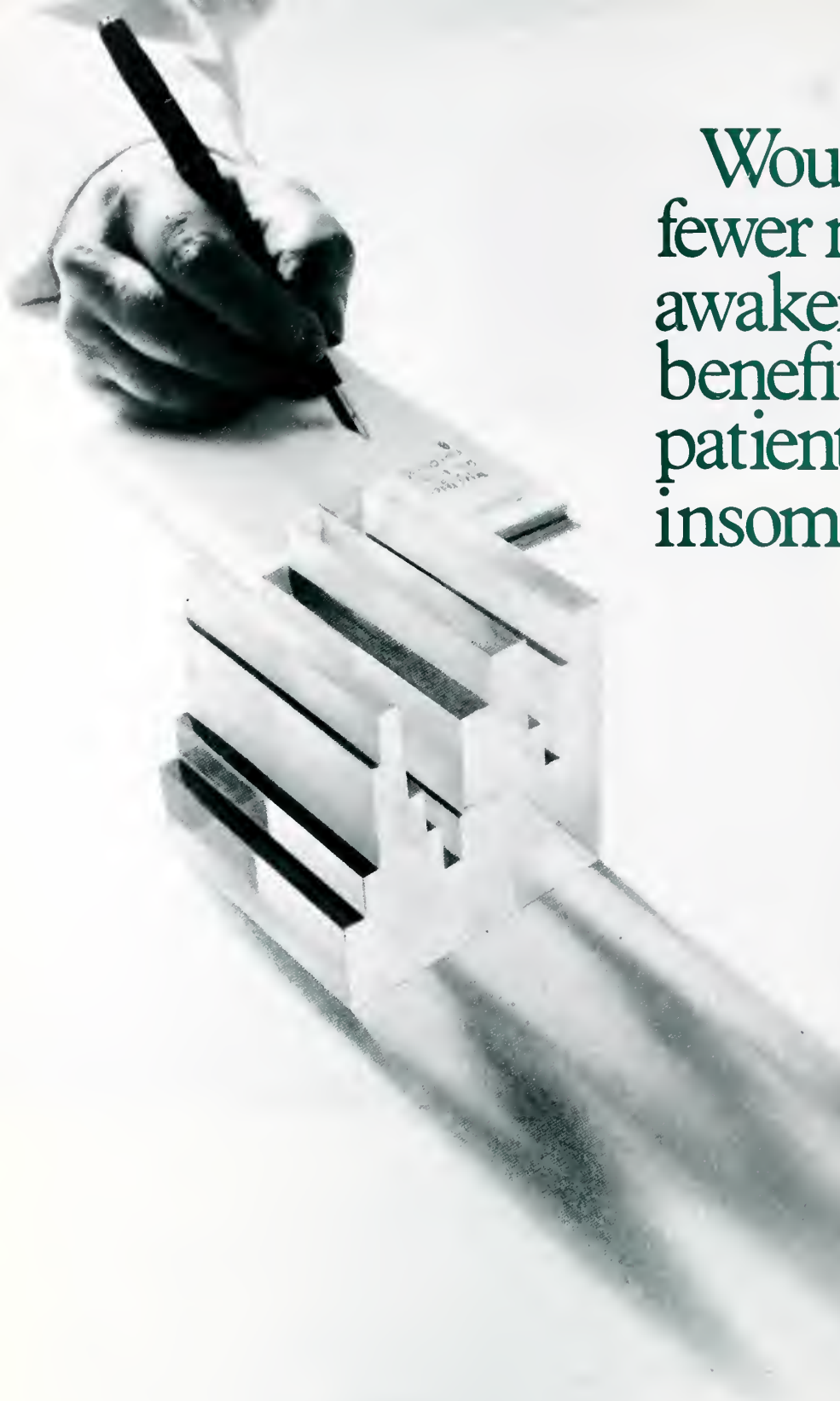
Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

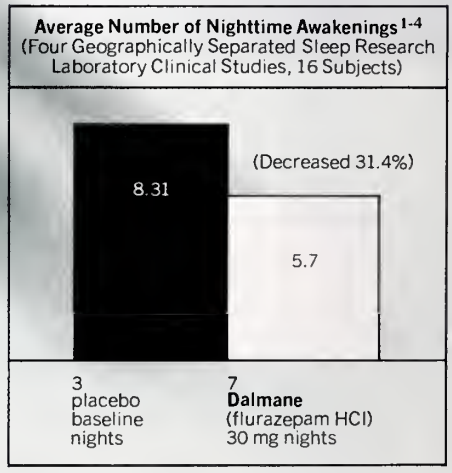
Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*



Would sleep with fewer nighttime awakenings benefit your patients with insomnia?

Highly predictable results for your patients with trouble staying asleep...

...can be obtained with Dalmane (flurazepam HCl). As shown below, Dalmane significantly reduces nighttime awakenings:[1-4]



And for those with trouble falling asleep or sleeping long enough...

...Dalmane (flurazepam HCl) also delivers excellent results. Clinically proven in sleep research laboratory studies: on average, sleep within 17 minutes that lasts 7 to 8 hours.[5]

Dalmane (flurazepam HCl) is relatively safe, seldom causes morning "hang-over"...

...and is well tolerated. The usual adult dosage is 30 mg *h.s.*, but with elderly and debilitated patients, limit the initial dose to 15 mg to preclude oversedation, dizziness or ataxia. Evaluation of possible risks is advised before prescribing.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th annual Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971
3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
5. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

Depend on highly predictable results with

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.



specifically indicated for insomnia

Objectively proved in the sleep research laboratory:

- **sleep with fewer nighttime awakenings**
- **sleep within 17 minutes, on average**
- **sleep for 7 to 8 hours, on average,**

with a single *h.s.* dose.

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ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration



Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

main purpose of drug information for the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeling must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the information is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005



FAMILY PRACTIC
one ru

Richard O. Rutland, Jr., M.D.*

Long before there was a College of Community Health Sciences of the University of Alabama, the little town of Fayette, Alabama, was committed to its creation. For ten years, Fayette has served as a family practice preceptorship site for the School of Medicine of the University of Alabama in Birmingham. The townspeople have enthusiastically accepted the program, as well as the young people, medical students and their families. Three of the four primary care physicians who serve Fayette County are members of the American Academy of Family Physicians, and two have served for a number of years on this organization's state chapter education committee.

Early Beginnings

Several important milestones have helped to shape the College of Community Health Sciences and its involvement with Fayette and other small towns in family practice education. Relative to medical manpower deficiency and maldistribution, the people of Alabama made their wishes known emphatically in a political poll in 1970. The governor and the State legislature responded by appropriating substantial funding to meet these wishes. The President of the University of Alabama, Dr. David Mathews identified the potential role of his university in meeting this major need in Alabama and committed the vast resources of his institution.

Dr. John Burnum, practicing general internist of Tuscaloosa, performed yeoman service in a liaison capacity between the university and the local medical community. He felt that logic dictated the development of a primary care training program at that time to meet the medical needs of the area, and that local resources were not adequate for a program in his own specialty, internal medicine. Therefore, he has vigorously supported the family practice residency approach and urged his colleagues to do likewise.

No single event, however, had as much to do with shaping the course of family practice education at Tuscaloosa as did the arrival of Dr. William R. Willard. Prior to coming to Alabama, he had been Dean at the University of Kentucky College of Medicine, and before that, he was Dean at the Syracuse. Although recipient of several awards for accomplishments in medical education, perhaps most important, he chaired an Ad Hoc Committee of the Council on Medical Education of the AMA on Education for Family Practice. The report of this committee, "Meeting the Challenge of Family Practice," helped to establish family medicine as a legitimate specialty and an integral component of the curricula of medical schools.

*Practicing family physician, Fayette, Alabama; Clinical Associate Professor, College of Community Health Sciences, University of Alabama, Tuscaloosa.

Dr. Willard's vast experience has provided him with the rare combination of impeccable academic credentials and keen appreciation of the rural public's needs. He is equally effective and at ease with his academic friends of long standing in the American Association of Medical Colleges and with his new-found friends in his present home town of Moundville. When he sits down in conversation with citizens of Fayette, Centreville and Eutaw, his quiet sincerity conveys the feeling that he is a man who talks their language, understands their needs and has a plan to help with their deplorable medical situations.

Fayette As A "Laboratory"

Dr. Willard and the community of Fayette reached an understanding early in the development of the College of Community Health Sciences that this little town would serve as a "laboratory" to study methods of improving medical care in rural Alabama. The existence of a 40-year-old private medical clinic, the community's experience in family practice education and the proximity (40 miles) to the University campus constituted the most important reasons for this decision. The town's citizens were implored not to expect too much too soon, and this they learned to appreciate. They have welcomed any and all opportunities to share in the growth of the program. Without apology, they intend by their efforts, to assure good medical care in the future for their town.



From left: Dr. John Packard, Associa
Dean, College of Community Health Science
HEW Secretary and former UA Presider
Dr. David Mathews; and Dr. Rutlan

Four years have passed since the first uncertain steps were taken to develop in Tuscaloosa a program to train the kind of doctor so badly needed in Alabama. From an ambitious idea to a vigorous but still developing university-

DUCATION
mmunity's involvement

affiliated program with eighteen residents, medical students in their clinical years, a substantial faculty and a capital investment of several million dollars–what has it all meant to this little town which has had such fond hopes for its success?

A report on what has been done for Fayette and other communities of West Alabama is the chief thrust of this paper. However, it represents not only a progress report, but also an appeal to other rural areas to assess their needs and potential solutions. Programs in Fayette and in West Blocton, Centreville and Eutaw are prototypes to be studied for the future benefit of all of rural Alabama.

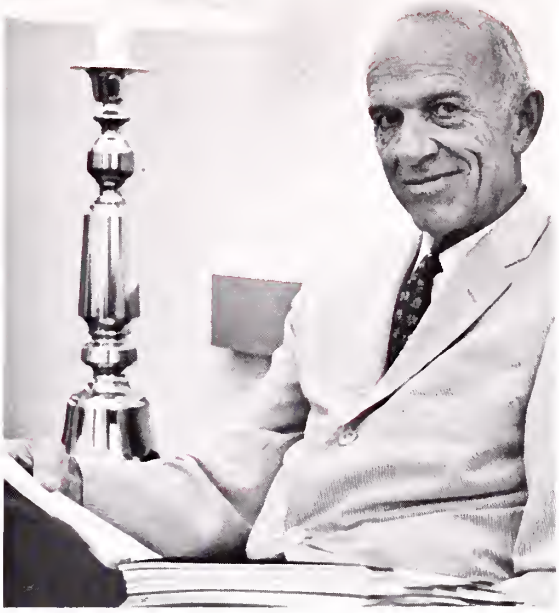
A short time after he arrived in Alabama, Dr. Willard began involving in his program the very people who have had the greatest experience with rural medicine and who have probably given the most thought to solving the medical dilemma of rural Alabama–the country doctors themselves. So long ignored by medical educators and demoralized by attitudes within the profession, Alabama's country doctors have responded beautifully to Dr. Willard's concern for their problems and interest in their contributions toward solving these problems.

The Effects Upon Fayette

The public relations benefits have been enormous. Press releases and talks to civic groups by Dr. Willard and other University of Alabama faculty have convinced the citizens of Fayette and other small towns that at long last someone in a position to do something is genuinely interested and that help is on the way. Citizen interest and eagerness to participate is almost unlimited.

The rural citizen, starved for good medical care, envisions the answer for his needs as a personal physician–"my doctor". He can be led to understand, however, that the delay from decision making to end product in medical education is long; the College of Community Health Sciences is a young institution and its first finished product will not be ready to attack the problems of rural Alabama for another year. (One resident is taking a six months' leave of absence to practice in Bibb County, one of the most critical areas of medical need in Alabama.) As its name implies, the College of Community Health Sciences is involved in training the medical team, and fortunately the University of Alabama has a number of ongoing medically allied programs which can offer some assistance in the interim.

Fayette medical institutions have been brought into the picture. Fayette County Hospital has become an integral part of the teaching program. The local mental health program has been upgraded. Formerly suspect in the minds of the town's physicians because of political involvement, it is becoming a vital part of the community's medical system. Psychiatrists and psychologists from the University serve as consultants. There has been cooperative effort between representatives of the College teaching program and the local health department.



WILLIAM R. WILLARD, M.D.
Dean of the College of Community Health Sciences

Continuing medical education in Fayette has been accelerated, not only for physicians but for other members of the medical team. University of Alabama faculty have spoken at monthly staff meetings, participated in hospital in-service education and conducted courses at the local junior college. Students and residents who have come to Fayette have constituted an immense stimulus to continuing education. The College librarian has aided in the development of a core family medicine library in the hospital. Use of University video equipment for professional and patient education is gaining popularity.

Patient care has improved quantitatively and qualitatively. This has resulted from the additional manpower and expertise of students, residents and faculty functioning in Fayette, as well as in Tuscaloosa. An ophthalmologist, a member of the adjunct faculty, now comes to Fayette twice a month. Previously existing specialty assistance has increased. Tuscaloosa radiologists, also on the adjunct faculty, are seeking ways to increase radiological coverage for rural areas; the possibility of including a rural rotation in their training of the X-ray technician is being explored.

A pediatrician on the College faculty was instrumental in establishing a high-risk nursery at Druid City Hospital in Tuscaloosa, the College's primary teaching hospital. Working with a faculty obstetrician and nurse educators, he has conducted courses on newborn care for hospital personnel in most of the small hospitals in the area.

University of Alabama faculty members in schools other than the College of Community Health Sciences are contributing their talents to upgrading medicine in Fayette. The Sociology Department has conducted two recent studies of rural Alabama, one commissioned by the State Mental Health Committee, in which Fayette County participated. Two psychologists from the faculty have conducted a course on the art of listening and communicating at Brewer State Junior College in Fayette.

A nutritionist from the Department of Home Economics

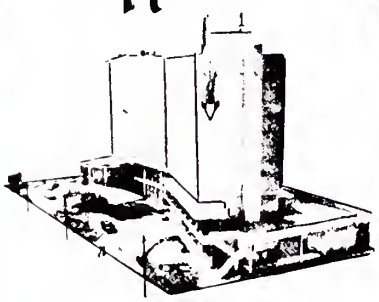
spends one-half day weekly in the private medical clinic in Fayette counseling patients. Each week she brings with her a student in dietetics. Over a period of several months their efforts have added significantly to the care of such problems as obesity, diabetes, infant and child malnutrition and heart diseases.

Conclusion

One of the principal reasons given by doctors for leaving rural areas has been a sense of professional isolation. Alignment with the College of Community Health Sciences has eliminated this as a possibility for doctors in Fayette. Interchange of faculty, medical manpower, students and almost daily telephone conversations give assurance that a continuous stream of medical information pours into this little town.

Many country doctors have for a long time felt that they had some valuable thoughts which might contribute to the solution of the medical problems of rural America. The College of Community Health Sciences and Dr. Willard have offered a sympathetic and supportive audience and are eager to do more. The resources of the University of Alabama are available to pursue and research ideas. Suggestions from doctors in Bibb, Greene, Baldwin, Fayette and other counties over the State have been heard, exchanged and considered. How heartwarming it is for many of these men to be listened to sympathetically; how gratifying and exhilarating it is for them to feel that they have some part in helping to solve a major problem for our state.

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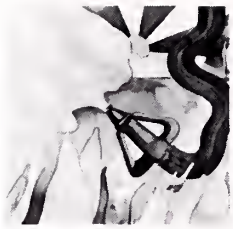
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Indications: Pro-Banthine is effective as adjunctive therapy in the treatment of peptic ulcer. Dosage must be adjusted to the individual.

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Warnings: Patients with severe cardiac disease should be given this medication with caution. Fever and possibly heat stroke may occur due to anhidrosis.

Overdosage may cause a curare-like action, with loss of voluntary muscle control. For such patients prompt and continuing artificial respiration should be applied until the drug effect has been exhausted. Diarrhea in an ileostomy patient may indicate obstruction, and this possibility should be considered before administering Pro-Banthine.

Precautions: Since varying degrees of urinary hesitancy may be evidenced by elderly males with prostatic hypertrophy, such patients should be advised to micturate at the time of taking the medication.

Overdosage should be avoided in patients severely ill with ulcerative colitis.

Adverse Reactions: Varying degrees of drying of salivary secretions may occur as well as mydriasis and blurred vision. In addition the following adverse reactions have been reported: nervousness, drowsiness, dizziness, insomnia, headache, loss of the sense of taste, nausea, vomiting, constipation, impotence and allergic dermatitis.

Dosage and Administration: The recommended daily dosage for adult oral therapy is one 15-mg. tablet with meals and two at bedtime. Subsequent adjustment to the patient's requirements and tolerance must be made.

How Supplied: Pro-Banthine is supplied as tablets of 15 and 7.5 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type vials of 30 mg.

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Pro-Banthine is considered adjunctive in total peptic ulcer therapy that may include diet, conventional antacids, bed rest, and other supportive measures.

Pro-Banthine is provided in several different dosage forms which will meet virtually any clinical need. It is just as versatile in filling patient needs, among which are:

"Antiacid" action—Pro-Banthine® (propantheline bromide) reduces gastric secretory volume and resting total and free acid.

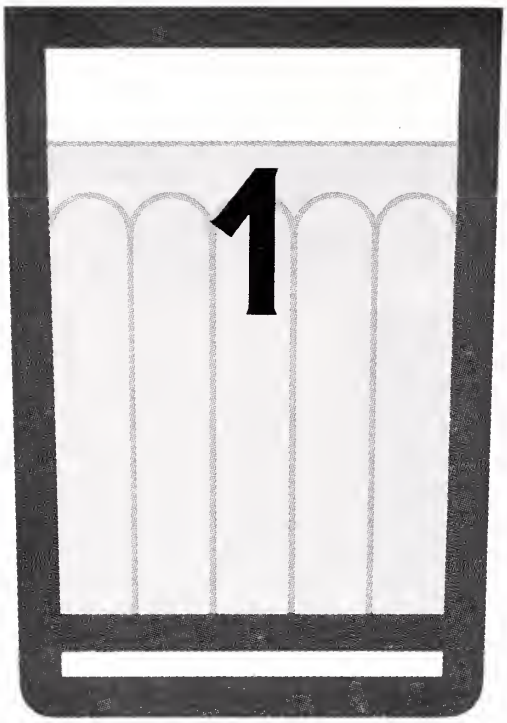
"Analgesic" action—Pro-Banthine helps to control the acid-spasm-pain complex.

Vigorous anticholinergic action—Pro-Banthine® Vials, 30 mg., are for intramuscular or intravenous use when prompt and vigorous anticholinergic action is required.

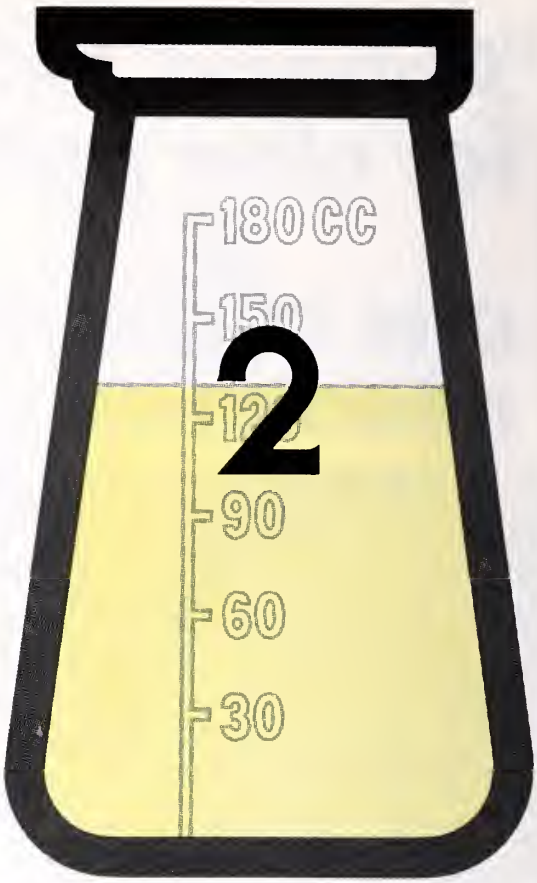
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Gantanol® (sulfamethoxazole) B.I.D.

Four tablets (0.5 Gm each) STAT- then 2 tablets B.I.D. for 10-14 days

Basic therapy with convenience for acute nonobstructed cystitis

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Acute, recurrent or chronic nonobstructed urinary tract infections (primarily pyelonephritis, pyelitis, and cystitis) due to susceptible organisms. ***Note:* Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials, including sulfonamides, especially in chronic or recurrent urinary tract infections.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Sulfonamide hypersensitivity; pregnancy at term and during nursing period; infants less than two months of age.

Warnings: Safety during pregnancy has not been established. Sulfonamides should not be used for group A beta-hemolytic streptococcal infections and will not eradicate or prevent sequelae (rheumatic fever, glomerulonephritis) of such infections. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy. Insufficient data on children under six with chronic renal disease.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *gastrointestinal reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia as well as thyroid malignancies in rats following long-term administration. Cross-sensitivity with these agents may exist.

Dosage: Systemic sulfonamides are contraindicated in infants under 2 months of age (except adjunctively with pyrimethamine in congenital toxoplasmosis).

Usual adult dosage: 2 Gm (4 tabs or teasp.) initially, then 1 Gm *b.i.d.* or *t.i.d.* depending on severity of infection.

Usual child's dosage: 0.5 Gm (1 tab or teasp.)/20 lbs of body weight initially, then 0.25 Gm/20 lbs *b.i.d.* Maximum dose should not exceed 75 mg/kg/24 hrs.

Supplied: Tablets, 0.5 Gm sulfamethoxazole; Suspension, 0.5 Gm sulfamethoxazole/teaspoonful.

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Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

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For long-term control of hypertension*

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **WARNING**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

'DYAZIDE'

Just once or twice daily for maintenance. Hydrochlorothiazide to help keep blood pressure down and triamterene to help keep potassium levels up.

AMA's Clinical Convention Flies to Hawaii !!

In addition to postgraduate courses, timely medical subjects will be offered each day in state-of-the-art lectures and symposia.

Advance Registration
AMA Clinical Convention
HONOLULU, HAWAII
November 30–December 5

SCIENTIFIC COURSES

Monday-Wednesday, Dec. 1-3/7:30-9:00 AM (4½ hour, 3-day course: $45)
1. Dermatology for Non-Dermatologists
2. Evaluation of the Unconscious Patient
3. Hyperlipidemia
4. Infectious Diseases in Children
5. Management of Adolescent Problems
6. Newer Antibiotics
7. Newer Concepts of Family Planning
8. Office Management of Sexual Difficulties
9. Peripheral Vascular Disease—Diagnosis and Treatment
10. Pulmonary Function Tests and Blood Gases

Monday-Wednesday, Dec. 1-3 (Numbers 1-10)
1st Choice #____; 2nd Choice #____; 3rd Choice #____

Monday-Wednesday, Dec. 1-3/10:30 AM-Noon (4½ hour, 3-day course: $45)
11. Acid-Base, Fluid and Electrolyte Balance
12. Advanced Electrocardiography
13. Critical Patients—Critical Decisions
14. Normal and Abnormal Uterine Bleeding
15. Office Management of Anorectal Disorders
16. Office Practice of Gynecology
17. Physicians' Marriages
18. Special Problems of Child Abuse
19. Surgical Lesions of the Intestines—Diagnosis and Treatment
20. Treatment of Common Pediatric Allergies

Monday-Wednesday, Dec. 1-3 (Numbers 11-20)
1st Choice #____; 2nd Choice #____; 3rd Choice #____

Thursday-Friday, Dec. 4-5/7:30-10:30 AM (6 hours for total course; 3 hours on Thursday, 3 hours on Friday:$60)
21. Acid-Base, Fluid and Electrolyte Balance (repeat)
22. Basic Electrocardiography
23. Birth Defects and Clinical Genetics
24. Dermatology for Non-Dermatologists (repeat)
25. Fetal Monitoring
26. Ophthalmoscopy for the Non-Ophthalmologist
27. Pediatric Cardiology
28. Pitfalls of Emergency Room X-Rays
29. Office Endocrinology
30. Immunology—1976
31. The Uterine Pap Smear

Thursday-Friday, Dec. 4-5 (Numbers 21-31)
1st Choice #____; 2nd Choice #____; 3rd Choice #____

Offered Both Monday & Tuesday, Dec. 1 & 2/7:30 AM-Noon (4½-hour course: $45)
32. Basic Life Support—Cardiopulmonary Resuscitation (Dec. 1) _____
33. Basic Life Support—Cardiopulmonary Resuscitation (Dec. 2) _____

Wednesday-Friday, Dec. 3-5/9:00 AM-Noon (9-hour course: $90)
34. Advanced Life Support—Cardiopulmonary Resuscitation. (Prerequisite: Basic Life Support Course) (Dec. 3-5) _____

Courses of the AMA Committee on the Medical Aspects of Sports (Each a 3-hour course: $30)
Monday, Dec. 1/7:30-9:00 AM & 10:30-Noon
35. The Physical Exam _____

Tuesday, Dec. 2/7:30-9:00 AM & 10:30-Noon
36. The Oriental Arts (Karate, Judo, Yoga) _____

Wednesday, Dec. 3/7:30-9:00 AM & 10:30-Noon
37. Emergency Care on the Field _____

Thursday, Dec. 4/7:30-10:30 AM
38. Wrestling _____
39. Aquatic Sports _____

Friday, Dec. 5/7:30-10:30 AM
40. Rehabilitation _____

Tuesday-Wednesday, Dec. 2-3/7:30-10:30 AM (6 hours for total course; 3 hours on Tuesday, 3 hours on Wednesday: $60)
41. Writing for Scientific Journals _____

LUNCHEON ROUND TABLES
(Held in Hilton Hawaiian Village Long House Room, luncheon round tables are jointly sponsored by the AMA Auxiliary and AMA Council on Scientific Assembly. Cost: $10.00 each.)
Tuesday, December 2 (12:15-1:45 PM) • Topic—Ancient Polynesian Medicine _____
Thursday, December 4 (12:15-1:45 PM) • Topic—Dehli Belly, Gyppy-Tummy, and Other Diseases of Travelers _____

General Registration

_____ Non-member physicians: $35
_____ Guests of non-members: $10
_____ Foreign M.D.'s: no fee
_____ AMA members and their guests: no fee
_____ Medical students, interns and residents: no fee

My remittance of $_____ is enclosed. Make check or money order payable to the American Medical Association. Payment must accompany registration.

Please print

Name _____
(Each physician must register in his own name)

Office Address _____

City/State/Zip _____

I am a member of the AMA through the following State Medical Association or government service _____

Office Phone No. _____

☐ Send travel information; or call toll-free to: (800) 621-1046, except in Alaska and Hawaii; in Illinois call (312) 782-3462

Return this form today to AMA's Dept. of Membership Statistics, 535 N. Dearborn St., Chicago, IL 60610

AMA representing the profession:

The AMA is primarily a scientific organization. More than 54 per cent of the AMA's budget is spent to improve the delivery of medical and health care; 12 per cent to improve the quality of American medicine; and 11 per cent to improve the public's health knowledge and practices. But these are mere percentages. In fact, every dollar the AMA spends is aimed at helping the physician practice first-rate medicine. During the past year some 1,000 bills relating to medical and health care were introduced in Congress. It is the objective of the AMA to see that this legislative action furthers, rather than restricts, the quality of medical care and the ability of physicians to do their best work. Decisions made by the House of Delegates at the 1975 Annual Convention assure that these activities will continue. By voting to increase the dues—to $250 for regular members and to $35 for intern and resident members—the House provided the means for continued national representation of the profession. The response of the membership to the $60 special assessment voted at the 1974 Clinical Convention indicates clearly that physicians want a strong, active AMA and are ready to support it.

some of the things the

AMA Wins Round Three In Legal Battle Over Utilization Review Regulations

On May 27, the AMA was granted a preliminary injunction against utilization review regulations requiring 24-hour concurrent review of all hospital admissions under Medicare and Medicaid. The Federal government's motion to stay this decision was denied on May 28 by the District Court and on June 30 by the Circuit Court of Appeals.

Then, on July 22, the AMA won another significant legal victory on behalf of practicing physicians. A three-judge U.S. Circuit Court of Appeals Panel **denied a motion by the Federal government to cancel a preliminary injunction against implementation of the regulations.** The Appeals Court said the AMA had "sufficient evidence to warrant a preliminary injunction" and stated: "These new regulations may have the effect of directly influencing a doctor's decision on what type of medical treatment will be provided, thus directly interfering with the practice of medicine."

AMA Sues HEW On Maximum Allowable Cost Regulations

On July 28, 1975, HEW formally announced that its MAC regulations would go into effect in nine months. The regulations set a maximum allowable cost for drugs administered to patients under Federal health care programs.

Four hours after the HEW announcement, the AMA announced it would file suit asking for a declaratory judgment that the regulations are invalid and also for a permanent injuction. The AMA suit was filed in U.S. District Court in Chicago on July 29. The AMA maintains that the regulations would violate the constitutional rights of both patients and physicians and would create a labyrinth of drug regulations without assuring favorable cost benefits.

AMA Wins Fight To Prevent Federal Control Of Residencies

The AMA won an important victory in the U.S. House of Representatives when **provisions for Federal control of medical residencies were stricken from the Health Manpower Act of 1975.** The original bill called for Federal restrictions on the allocation and distribution of residencies.

The AMA also strongly opposed another provision of the bill requiring medical students to pay back Federal capitation grants given to medical schools—money medical schools receive for each student in the institution. Although the House supported the provision, it was diluted by amendments which exempt all current students and which eliminate payback requirements for graduates serving in the armed forces.

MA is doing in 1975...

AMA Acts To Set Up Professional Liability Reinsurance Firm

The AMA is taking immediate and concrete action to ease the medical liability insurance crisis. At the 1975 Annual Convention, the House of Delegates authorized the establishment of an AMA reinsurance company as soon as possible. This kind of insurance has been unavailable in the open market.

This new company would require the participation of five state society insurance companies with a minimum of $12 million in annual premiums and AMA capitalization of $1.5 million. When formed, it will provide a backup mechanism covering excess losses for those state medical societies that have established their own medical liability insurance firms.

Also, a special AMA staff task force is working actively with state medical associations, state legislators, insurance and legal representatives and others in developing solutions to liability problems at the state level.

AMA To Aid Members In Third Party Disputes

In response to the growing need for counsel to physicians in dealing with third parties, the AMA has established a new Department of Negotiations. This department will train state, local, and specialty society executive staff and societies members in the art of skillful negotiations and will also intervene directly on behalf of the profession in disputes of national significance.

National Health Insurance

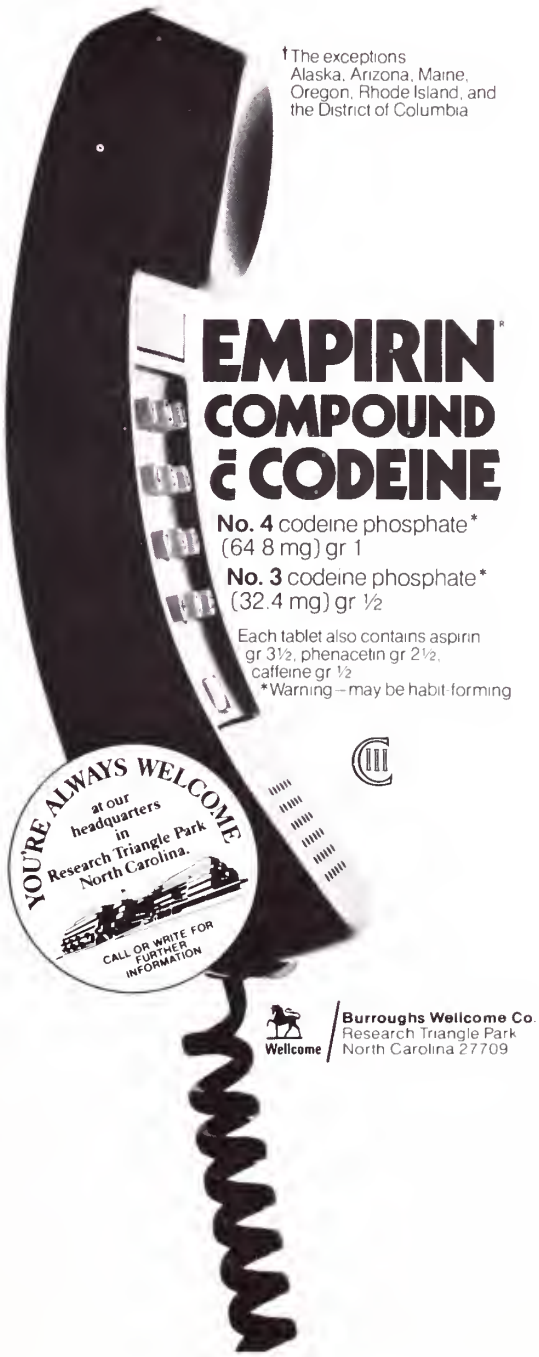
The AMA believes that any program of national health insurance must leave the physician free to practice in accordance with his professional judgment and with the right to fee-for-service. Similarly, the patient must be free to choose the type of care and the physician he wants. This position is implicit in the AMA's NHI plan that has been introduced into the Congress as HR 6222. While actively advocating this plan, the AMA has consistently opposed other NHI proposals that call for the restructuring of our present health care system and increased Federal involvement in the delivery of care.

AMA Membership Sets Record

For the third consecutive year, the AMA has broken a record in dues-paying membership. As of August 8, 1975, the AMA had over 5,000 more dues-paying members than at the same time last year, which was an all-time record year. Membership among medical students and housestaff has shown a 100 per cent increase. In late August, AMA membership had exceeded its 1974 total.

The Pain Phone

When a telephone prescription for pain relief is necessary or convenient, you can call in your order for Empirin Compound with Codeine in 45 of the 50 states† That includes No. 4, which provides a full grain of codeine for more intense, acute pain.



†The exceptions Alaska, Arizona, Maine, Oregon, Rhode Island, and the District of Columbia

EMPIRIN® COMPOUND ₵ CODEINE

No. 4 codeine phosphate* (64.8 mg) gr 1

No. 3 codeine phosphate* (32.4 mg) gr ½

Each tablet also contains aspirin gr 3½, phenacetin gr 2½, caffeine gr ½

*Warning – may be habit-forming

Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

Dr. Walker Reynolds, Jr.

The

Since time in memorium, man has counted among his number certain individuals who have seemingly been "gifted" with extraordinary talents and abilities. It can even be said that many such individuals possess that "genius" quality; an exceptional superiority or an unusual power of invention.

What is the nature of this term "genius"? Is it something that is attained by intuition and perserverance? Or is it inherited? Thomas Edison was quoted at one time as saying that "genius is one per cent inspiration and 99 per cent perspiration."

Whatever determines "genius," that incalculable and marvelous human trait which many seek but few possess, has taken residence in the person of Dr. Walker Reynolds, Jr., an Anniston surgeon, a man who has been blessed with extraordinary talents. He has made quite an impact upon the practice of medicine with his surgical inventions and he is held in high esteem, appropriately so, by his fellow surgeons on a national and international scale.

A native of Anniston, Dr. Reynolds currently has seven patents on various medical devices and instruments. His first "invention", a needle holder, was made during his surgical residency at the UAB hospital in 1949. It was used in conjunction with the following procedure.

Dr. Reynolds describes it this way: "As far as I know, I was the first person to ever do a percutaneous catheterization of an artery or vein. Using a 13-gauge needle, I threaded a ureteral catheter into a femoral vein of a bilateral amputee for I.V. fluid (plastic catheters were not available at that time). The method was advantageous over the 'cut down' technique in that there was no destruction of a vein, little danger of wound infection and it proved to be a more rapid way to enter the vein."

This breakthrough was followed by other inventions, among them:

(1) Cervical Tongs for fractures of the cervical vertebra—(today, these are used by the Neurosurgical Department at the UAB Medical Center.)

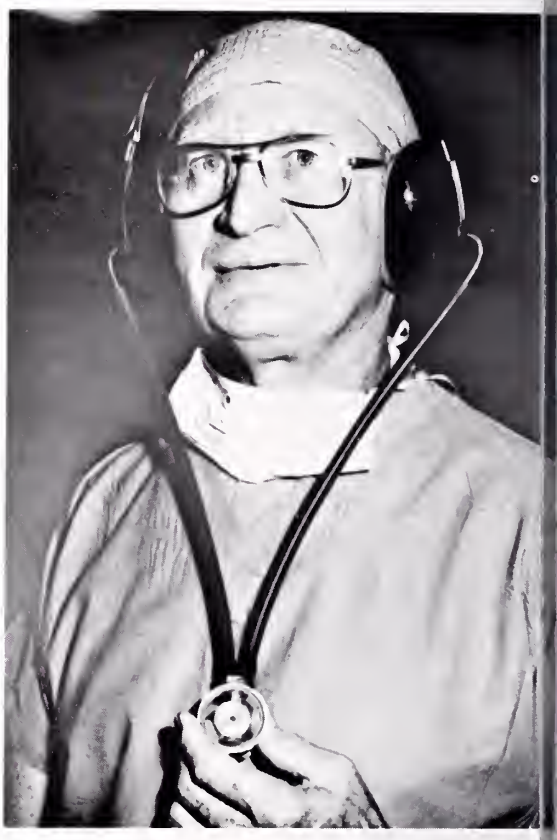
(2) Urinometer—(this device hooks onto the patient's bed and is used to collect precise hourly urines by rotating beakers operated by a clock mechanism. A catheter is placed in the patient's bladder and connected to this machine. The idea was developed since hourly urines are extremely important in burns and other similar trauma cases.)

(3) Self-Compression Bone Plate—(the pressure exerted in this single plate device comes from the screws going down an incline plane and jamming the ends of the bone fragments together. This gives an excellent apposition with some compression, but not over compression.)

(4) A Collapsible Stethoscope—(a metal tubing collapses like an antenna in place of the long rubber connecting length.)

(5) "Sound Barrier" Stethoscope—(incorporates ear muffs to protect the ear from surrounding extraneous noises.)

(6) Chest Piece for Stethoscope—(this revolutionary chest piece has built-in chambers on the base side which help in hearing heart murmurs picked up at low frequency levels.)



(7) Abdominal Self-Retaining Retractor—(the retractor works on a rack and pinion principle with an automatic locking device. Four blades are used for abdominal wall retraction and up to six more may be added for visceral retraction.)

This man of many talents has a vision to find better methods in patient care through mechanical research and provide surgeons with refined instruments to expedite various operative procedures with increased efficiency. He comments that he gets many of his ideas while sketching various designs at home during his leisure. He leaves nothing to chance, documenting everything with a date since patents require prior proof that others were not first with a similar invention.

He is a pioneer in the use of metal clips and staples in surgery having invented operations using metal clip and staple techniques on the stomach, bowel, appendix and hemorrhoids which are documented in surgical literature.

He says that his wife, the former Helen Garber of Birmingham, often catches him sketching on his church

nventor among us

bulletin during the minister's sermon on Sunday morning. In order to justify his occasional inattention during such crucial spiritual moments, Dr. Reynolds humorously cautions her that he is receiving "divine inspiration" at that time and he is merely jotting down his ideas lest he forget them before the minister finishes.

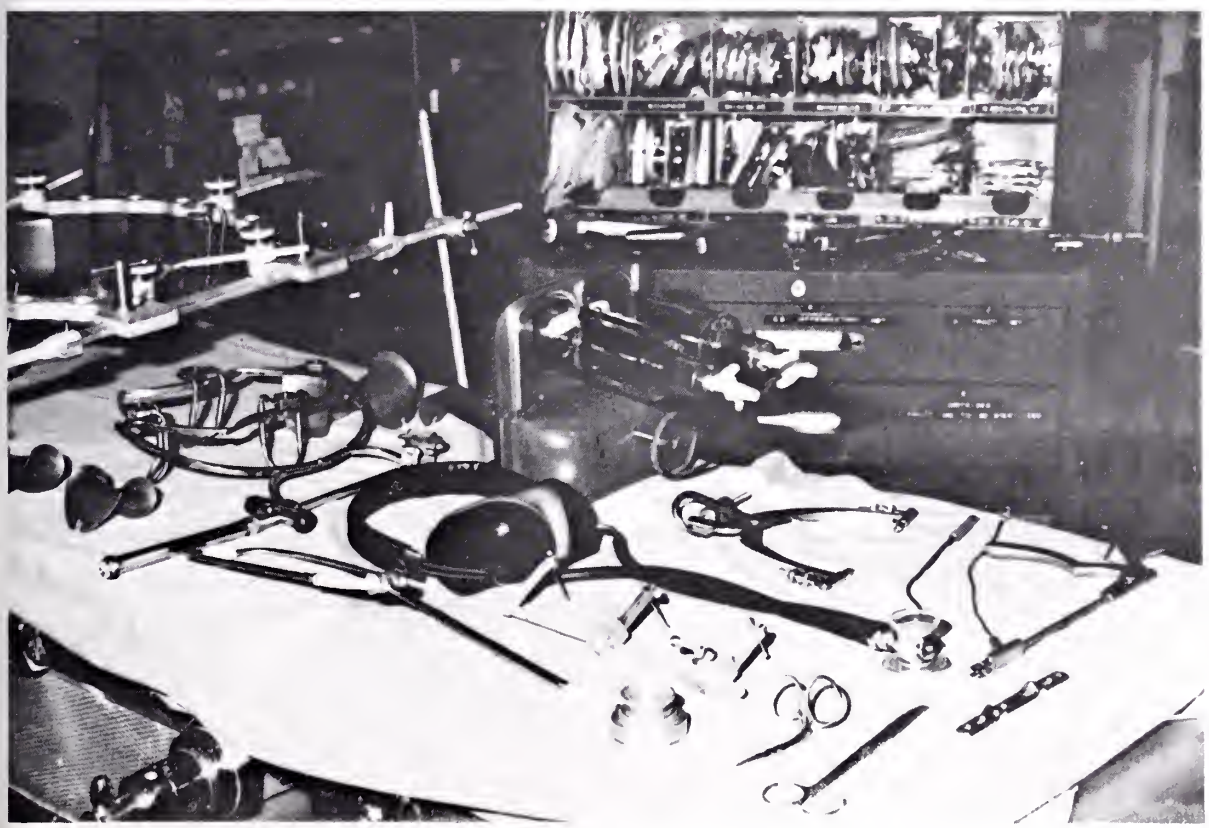
His achievements extend to the realm of athletics as well since he has captured both amateur golf and tennis championships around the state having been a state champion in both golf and tennis. He is a past president of the Alabama Golf Association, as well as the Southern Golf Association.

In recent years, he has contributed over 20 manuscripts for publication in medical journals describing new instruments as well as new operative techniques.

A corporation has been formed in Anniston through which his ideas become reality. In addition to Dr. Reynolds, there is a part-time machinist who develops the prototype models and a draftsman who does shop drawings to scale.

No article about Dr. Reynolds could be complete without some revelation about his inventions outside the medical field. He has designed a combination seatbelt incorporating an air-protective mattress. Would you believe a "singing" golf club? As he describes it, a thin strip of metal is inserted in the head of the club and each time the ball is putted, the strip vibrates, thus producing the "singing" effect. Or better yet, a "weighted" golf club, adjustable according to the heaviness of the green? At one time, he invented a travel bag with sides that folded out into a putting green, the last fold containing the cup. A perfect gift for the traveling businessman who has everything!

ft—Dr. Reynolds displays his "sound barrier" stethoscope, tter known as an audioscope. Below—the surgical inventions Dr. Reynolds on revue at the Northeast Alabama Regional edical Center.





LUFYLLIN (dyphylline)

Before prescribing, please review complete product information, a summary of which follows:

Indications: For relief of acute bronchial asthma and for reversible bronchospasm associated with chronic bronchitis and emphysema.

Precautions: Exercise caution with use in the presence of severe cardiac disease, renal or hepatic malfunction, glaucoma, hyperthyroidism, peptic ulcer, and concomitant use of other xanthine-containing formulations or other CNS stimulating drugs.

Adverse Reactions: May cause nausea, headache, cardiac palpitation and CNS stimulation. Postprandial administration may help to avoid gastric discomfort.

How Supplied:

LUFYLLIN, 200 mg., Tablets: NDC 19-R521-92, bottle of 100; NDC 19-R521-97, bottle of 1000.

LUFYLLIN Elixir: NDC 19-R515-68, pint bottle; NDC 19-R515-69, gallon bottle.

LUFYLLIN Injection: NDC 19-R537-T2, box of 25 x 2 ml. ampuls.

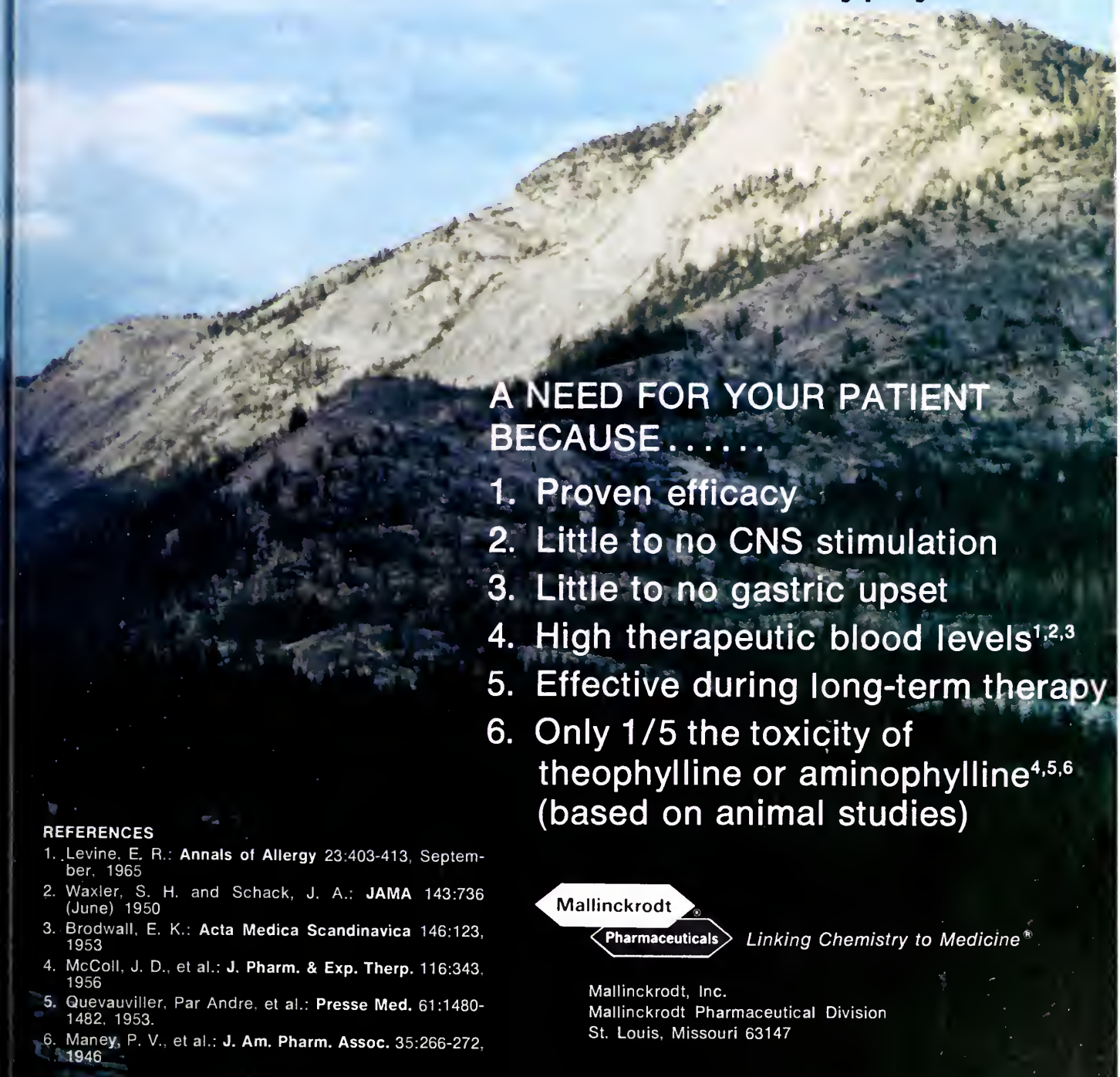
For relief of acute bronchial asthma and for reversible bronchospasm associated with chronic bronchitis and emphysema.

LUFYLLIN®
(dyphylline)

...a basic need for the bronchospastic patient.

Tablets: 200 mg dyphylline
Elixir: per 15 ml: dyphylline 100 mg, alcohol 20% v/v

the bronchodilator with a difference...dyphylline.



A NEED FOR YOUR PATIENT BECAUSE.....

1. Proven efficacy
2. Little to no CNS stimulation
3. Little to no gastric upset
4. High therapeutic blood levels[1,2,3]
5. Effective during long-term therapy
6. Only 1/5 the toxicity of theophylline or aminophylline[4,5,6] (based on animal studies)

REFERENCES

1. Levine, E. R.: **Annals of Allergy** 23:403-413, September, 1965
2. Waxler, S. H. and Schack, J. A.: **JAMA** 143:736 (June) 1950
3. Brodwall, E. K.: **Acta Medica Scandinavica** 146:123, 1953
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Mallinckrodt® Pharmaceuticals *Linking Chemistry to Medicine®*

Mallinckrodt, Inc.
Mallinckrodt Pharmaceutical Division
St. Louis, Missouri 63147



When sequential contraception is preferred...

© Ortho Pharmaceutical Corporation 1975

Ortho-Novum SQ provides good cycle control

provides a low sequential dosage

effective in clinical trials, with a pregnancy rate of 0.43 per 100 woman years

generally well tolerated†

available in the unique DIALPAK* Tablet Dispenser

Ortho-Novum SQ

TRADEMARK

Each white tablet contains 0.08 mg mestranal. Each blue tablet contains 2.0 mg norethindrone and 0.08 mg mestranol.



†Serious as well as minor conditions have been reported following the use of oral contraceptives. These conditions include thromboembolic disease. The physician should remain alert to the earliest manifestations of any symptoms of serious disease and discontinue oral contraceptive therapy when appropriate. The physician should be fully aware of the complete Prescribing Information for this product.

See prescribing information on following page.

*TRADEMARK

OJ 622-5

In sequence...



Ortho-Novum SQ Tablets

TRADEMARK

Description: ORTHO-NOVUM SQ Tablets provide a sequential oral contraceptive regimen consisting of white tablets containing only mestranol 0.08 mg, and blue tablets containing both mestranol 0.08 mg and norethindrone 2.0 mg

Action: Gonadotrophin suppression.

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure and reduced tolerance to carbohydrates, have been reported and appropriate tests should be conducted to monitor these during oral contraceptive therapy. Liver disease has also been reported, and the physician should be alert to its earliest manifestations.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency for some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can neither be affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication: Contraception

Contraindications: 1. Thrombophlebitis, thromboembolic disorders, cerebral vascular disease, or a past history of these conditions. 2. Markedly impaired liver function. 3. Known or suspected carcinoma of the breast. 4. Known or suspected estrogen-dependent neoplasia. 5. Undiagnosed abnormal genital bleeding. 6. Known or suspected pregnancy.

Warnings: 1. The physician should be alert to the earliest manifestations of thrombotic and thromboembolic disorders. Thrombophlebitis, cerebrovascular disorders including hemorrhage, pulmonary embolism and retinal thrombosis. Should any of these occur or be suspected, the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism and cerebral vascular disease: occlusive or hemorrhagic, and the use of oral contraceptives. There have been three principal studies in Great Britain[1-3] leading to these conclusions and three in this country.[4-7] The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while the United States studies found relative risks of 4.4 to 11, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as non-users.

In May, 1974, the Royal College of General Practitioners in England[8] issued an interim report of its continuing large-scale prospective study comparing a user group to a non-user group. This study in its interim analysis states: "A statistically significant higher rate of reporting of cerebrovascular accidents in Takers is evident, but the numbers are too small to justify an estimation of the degree of risk." The study also reported a higher incidence of superficial and deep vein thrombosis in users as compared to non-users. The risk of superficial and deep vein thrombosis was reported to be lower in women using 50 mcg estrogen preparations.

The Sartwell study[4] indicated that the risk did not persist after discontinuation of administration. Both the Sartwell and the Royal College studies indicated that the degree of risk was not associated with duration of treatment.

In a collaborative American study[5,6] of cerebrovascular disorders in women with and without predisposing causes, it was estimated that the relative risk of thrombotic stroke was 4.1 to 9.5 times greater in users than in non-users. A comparable estimate for hemorrhagic stroke was 2.0.

None of the American studies was designed to evaluate a difference between products. However, the Sartwell study[4] suggested that there might be an increased risk of thromboembolic disease in users of sequential products.

Other retrospective studies[9,10] have reported an increased risk of post-surgery thromboembolic complications in oral contraceptive users. It has been recommended that therapy be discontinued at least one month prior to elective surgery.

2. Discontinue oral contraceptive medication if there is gradual or sudden partial or complete loss of vision, proptosis or diplopia, onset or aggravation of migraine or development of headache of a new pattern which is recurrent, persistent or severe, papilledema, or any evidence of retinal vascular lesions.

3. Fetal abnormalities have been reported to occur in the offspring of women who have taken progestogens and/or estrogens during pregnancy.[11,12] The safety of ORTHO-NOVUM SQ in pregnancy has not been demonstrated. Pregnancy should be ruled out before initiating or continuing the contraceptive regimen. Pregnancy should always be considered if withdrawal bleeding does not occur.

4. A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

5. Hepatic lesions (adenomas, hepatomas, hamartomas, regenerating nodules, etc.), occasionally fatal, have been reported in women on oral contraceptives. Such lesions may present as an abdominal mass or with the signs and symptoms of an acute abdomen. These lesions should be considered if the patient has abdominal pain or evidence of intra-abdominal bleeding. This has been reported in short-term as well as long-term users of oral contraceptives.

Precautions: 1. A thorough history and physical examination should be performed before prescribing oral contraceptives and periodically during their administration and should include special reference to breasts and pelvic organs, including Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. 2. Endocrine and possibly liver function tests may be affected by treatment with ORTHO-NOVUM SQ. Therefore, if such tests are abnormal in a patient taking ORTHO-NOVUM SQ, it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, pre-existing uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam, adequate diagnostic measures are indicated. 6. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 7. Any possible influence of prolonged ORTHO-NOVUM SQ therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 8. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving ORTHO-NOVUM SQ therapy. 9. The age of the patient constitutes no absolute limiting factor, although treatment with ORTHO-NOVUM SQ may mask the onset of the climacteric. 10. The pathologist should be advised of ORTHO-NOVUM SQ therapy when relevant specimens are submitted. 11. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids. 12. Cholestatic jaundice has been reported in users of oral contraceptives. If this occurs, ORTHO-NOVUM SQ should be discontinued. This condition is more likely to occur in patients who have experienced cholestatic jaundice of pregnancy. Patients with a history of cholestatic jaundice of pregnancy should be carefully observed during ORTHO-NOVUM SQ therapy.

Adverse reactions observed in patients receiving oral contraceptives: A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism, cerebral thrombosis and hemorrhage, gallbladder disease.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis, hepatic lesions with or without intra-abdominal bleeding.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, which may persist, cholestatic jaundice, migraine, rash (allergic), mental depression, change in weight (increase or decrease), breast changes (tenderness, enlargement and secretion), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post-partum, rise in blood pressure in susceptible individuals.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post-treatment, which tends to occur more frequently in women with a history of menstrual disorders; premenstrual-like syndrome; changes in libido, changes in appetite, cystitis-like syndrome; headache; intolerance to contact lenses; nervousness, dizziness, fatigue; backache; hirsutism; loss of scalp hair; erythema multiforme; erythema nodosum; hemorrhagic eruptions; itching; vaginitis.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function—increased sulfobromophthalein retention and other tests; coagulation tests—increase in prothrombin, Factors VII, VIII, IX and X, decrease in anti-thrombin III, increase in platelet aggregability; thyroid function—increase in PBI, and butanol-extractable protein-bound iodine and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.

References: 1. Royal College of General Practitioners: Oral Contraception and Thrombo-Embolic Disease. J Coll Gen Pract 13:267-279, May 1967. **2.** Inman, W.H.W.; Vessey, M.P.: Investigation of Deaths from Pulmonary, Coronary and Cerebral Thrombosis and Embolism in Women of Child-Bearing Age, Br Med J 2:193-199, April 27, 1968. **3.** Vessey, M.P.; Doll, R.: Investigation of Relation between Use of Oral Contraceptives and Thromboembolic Disease. A Further Report, Br Med J 2:651-657, June 14, 1969. **4.** Sartwell, P.E.; Masi, A.T.; Arthes, F.G.; Greene, G.R.; Smith, H.E.: Thromboembolism and Oral Contraceptives: An Epidemiologic Case-Control Study, Am J Epidemiol 90:365-380, Nov. 1969. **5.** Oral Contraception and Increased Risk of Cerebral Ischemia or Thrombosis, N Engl J Med 288 (17):871-878, April 26, 1973. **6.** Oral Contraceptives and Stroke in Young Women. Associated Risk Factors, J A M A 231 (7):718-722, Feb. 17, 1975. **7.** Oral Contraceptives and Venous Thromboembolic Disease, Surgically Confirmed Gall-Bladder Disease, and Breast Tumours: Report from the Boston Collaborative Drug Surveillance Programme, Lancet: 1399-1404, June 23, 1973. **8.** Royal College of General Practitioners: Oral Contraceptives and Health, 1-100, May 1974. **9.** Vessey, M.P.; Doll, R.; Fairbairn, A.S.; Glober, G.: Postoperative Thromboembolism and the Use of Oral Contraceptives, Br Med J 3:123-126, July 18, 1970. **10.** Greene, G.R.; Sartwell, P.E.: Oral Contraceptive Use in Patients with Thromboembolism Following Surgery, Trauma, or Infection, Am J Public Health 62(5):680-685, May 1972. **11.** Nora, J.J.; Nora, A.H.: Birth Defects and Oral Contraceptives, Lancet: 941-942, April 28, 1973. **12.** Janerich, D.T.; Piper, J.M.; Glebatis, D.M.: Oral Contraceptives and Congenital Limb-Reduction Defects, N Engl J Med 291(14):697-700, Oct. 3, 1974.

Ortho Pharmaceutical Corporation
Raritan, New Jersey 08869

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THE JOURNAL

of

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA

Published Under the Auspices of the Board of Censors

Volume 45 September, 1975 Number 3

Breast Cancer Management: Part III

A Comprehensive Program For The Management Of Breast Cancer*

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In an effort to summarize the current management for patients with all stages of breast cancer, the following guidelines were prepared for use at the University of Alabama in Birmingham. They are published here to provide this information to physicians in Alabama for their consideration and use when helpful. Two previous articles in this series have summarized the rationale for and details of two state-wide trials in surgical treatment and adjuvant chemotherapy.[13, 17] This article will present a plan for the management of patients at every stage of disease as well as for a number of special problems that may arise in the course of the disease. The Alabama Breast Cancer Project Office (ABC Project) at the University of Alabama in Birmingham (934-2306) will provide advice or assistance for any situation not included.

The management of patients with breast cancer includes detection, diagnosis, staging, appropriate therapy or therapies, and rehabilitation. Large-scale research projects to determine the optimal methods of breast cancer detection and the appropriate groups of patients who should receive periodic screening have recently been initiated by the National Cancer Institute in cooperation with the American Cancer Society. The results of those trials will not be available for several years; until then, this project will continue to recommend regular breast self-examination as the only method of breast cancer detection which is of established safety and efficacy. Mammography is very helpful in the evaluation of breast masses and of known breast disease, but its long-term safety remains to be demonstrated. Until the risk of long-term repeated mammographic examinations has been adequately defined, its widespread use in asymptomatic women cannot be condoned.

Insufficient data exist to provide reliable guidelines for a number of situations in breast cancer management. Local studies will be conducted at the University of Alabama in Birmingham to collect information about such situations so that subsequent guidelines can be improved. Details of these efforts are included so that other interested physicians in the State may enter patients into these studies if they desire. Each such situation is marked "local study".

*Supported in part by Contract No. NO1-CN-45129 from the National Cancer Institute, National Institutes of Health.
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I. DETECTION

A. Breast Self Examination.
This should be done during the week following each menstrual period; postmenopausal women should be encouraged to examine themselves at approximately monthly intervals.

B. Annual breast examination by a physician; more frequent examination is encouraged when the opportunity presents itself in the course of routine medical care.

C. Mammography (either by radiography or xeroradiography) should be used to supplement the history and physical examination and should be limited to certain high risk patients including:[14, 16]
1) women over 35 with a strong family history of breast cancer.
2) women with a previous diagnosis of cancer of one breast.
3) women over age 50 whose physical examination is inconclusive.

II. INITIAL WORK-Up AND CLINICAL TNM STAGING

For those patients presenting with a breast mass suggestive clinically of benign disease, a more limited work-up consisting of a complete history and physical examination should be done. The detailed work-up and clinical staging as outlined below should be done for any patient with a breast lesion highly suspicious of being carcinoma.

A. Complete History (including family history of breast cancer and menopausal status)

B. Complete Physical Examination

C. CBC and Platelet Count

D. SMA-12

E. Chest Radiograph

F. Investigation for bony metastases.
Standard clinical management dictates that radiographs should be done of painful bony areas. Additionally, a "local study" will be conducted at U.A.B. to evaluate the place of bone scintigraphy screening for metastatic disease (see Appendix A). Bone scintigraphy is a more sensitive method of detecting bone metastases but its place in screening remains unclear due to the large number of unexplained positive examinations.

G. Mammograms
Mammograms of the opposite breast should be obtained in women operated on for breast cancer. This should be done pre-operatively in patients who are highly suspect of having breast cancer. Specimen mammograms should be done on the specimen in women whose lesion is detectable only by mammogram to be sure the lesion in question has actually been removed and to aid the pathologist in identifying the area for histologic sections.

H. Estrogen Receptors[3,10,27]
Where the laboratory techniques are available, a search should be made for estrogen receptors. At present, the assay is not widely available; as the technique is simplified it may come into general use.

I. Biopsy of Contralateral Breast.[6,7,9,15,18,19,25,26]
Review of the medical literature and personal communications with surgeons who have participated in biopsy of the contralateral breast as a routine reveals varying results. For this reason, the surgeons at the University of Alabama in Birmingham, School of Medicine will collaborate closely with the diagnostic radiologists and pathologists and will conduct a study to further evaluate the clinical value of this procedure. (see Appendix B)

J. Biopsy
After the initial work-up and clinical staging has been done, one of the following biopsy techniques should be utilized to establish a tissue diagnosis prior to treatment of the disease:
- Punch Biopsy (of mass with ulceration or extension to skin)
- Needle Biopsy (if negative, followed by incisional or excisional biopsy)
- Incisional Biopsy (for very large lesions only)
- Excisional Biopsy

K. During the physician's initial work-up of each patient, he should stage the disease based on all available clinical information and record the status of the T (Primary Tumor), N (Regional Lymph Nodes), and M (Distant Metastasis) on the ABCP Case Registration Form. The subsequent treatment recommendations for the Initial Course of Tumor directed therapy are based on the patient's clinical TNM stage at the time of initial diagnosis.[24]

III. A. TREATMENT FOR INITIAL THERAPY

TNM CLINICAL CLASSIFICATION I- PRIMARY TUMORS	Record: T__ N__ M__	
TIS:	PRE-INVASIVE CARCINOMA (CARCINOMA IN-SITU), NON-INFILTRATING INTRADUCTAL CARCINOMA OR PAGET'S DISEASE OF THE NIPPLE WITH NO DEMONSTRABLE TUMOR (Note: Paget's Disease associated with a domonstrable tumor is classified according to the size of the tumor)	If No, or N1a & Mo: TOTAL MASTECTOMY (= REMOVAL OF ALL BREAST TISSUE PLUS A SAMPLE OF AXILLARY NODE).
To:	NO DEMONSTRABLE TUMOR IN THE BREAST	If No, or N1a & Mo: MODIFIED RADICAL MASTECTOMY
T1:	TUMOR OF 0.5 CM TO 2 CM OR LESS IN ITS GREATEST DIMENSION	IF No, N1a, N1b & Mo: (RANDOMIZE FOR LOCAL TRIALS)(*1 & *2) RAD. MASTECTOMY (YR. OF BIRTH: EVEN) MOD. RAD. MASTECTOMY (YR. OF BIRTH: ODD)
	T1a: WITH NO FIXATION TO UNDERLYING PECTORAL FASCIA AND/OR MUSCLE	
	T1b: WITH FIXATION TO UNDERLYING PECTORAL FASCIA AND/OR MUSCLE	RADICAL MASTECTOMY
T2:	TUMOR MORE THAN 2 CM BUT NOT MORE THAN 5 CM IN ITS GREATEST DIMENSION**	If No, N1a, N1b & Mo: RANDOMIZE (*1 & *2) RAD. MASTECTOMY (YR. OF BIRTH: EVEN) MOD. RAD. MASTECTOMY (YR. OF BIRTH: ODD)
	T2a: WITH NO FIXATION TO UNDERLYING PECTORAL FASCIA AND/OR MUSCLE	
	T2b: WITH FIXATION TO UNDERLYING PECTORAL FASCIA AND/OR MUSCLE	RADICAL MASTECTOMY
T3:	TUMOR MORE THAN 5 CM IN ITS GREATEST DIMENSION**	If No, N1a, N1b & Mo: RANDOMIZE (*1 & *2) RAD. MASTECTOMY (YR. OF BIRTH: EVEN) MOD. RAD. MASTECTOMY (YR. OF BIRTH: ODD)
	T3a: WITH NO FIXATION TO UNDERLYING PECTORAL FASCIA AND/OR MUSCLE	
	T3b: WITH FIXATION TO UNDERLYING PECTORAL FASCIA AND/OR MUSCLE	RADICAL MASTECTOMY
T4:	TUMOR OF ANY SIZE WITH DIRECT EXTENSION TO CHEST WALL OR SKIN (NOTE: CHEST WALL INCLUDES RIBS, INTERCOSTAL MUSCLES AND SERRATUS ANTERIOR MUSCLE BUT NOT PECTORAL MUSCLE)	
	T4a: WITH FIXATION TO CHEST WALL	4,000 RADS PRE-OPERATIVE RADIATION THERAPY + RADICAL MASTECTOMY + CHEST WALL RESECTION
	T4b: WITH EDEMA (INCLUDING PEAU D'ORANGE),	EDEMA < 1/3 OF BREAST: RAD.MAST. EDEMA > 1/3 OF BREAST: 4,000 RADS PRE-OP.RADIATION THERAPY + RAD.MAST.
	ULCERATION OF SKIN OF BREAST,	RADICAL MASTECTOMY
	OR, SATELLITE NODULES CONFINED TO THE SAME BREAST	PRE-OP. RADIATION THERAPY (4,000 RADS) + RADICAL MASTECTOMY
	T4c: BOTH OF ABOVE T4a & T4b, or ANY TWO OF T4b.	PRE-OP. RADIATION THERAPY (4,000 RADS) + RADICAL MASTECTOMY
	N- REGIONAL LYMPH NODES	
No:	NO PALPABLE HOMOLATERAL AXILLARY NODES	RANDOMIZE (*1 & *2)
N1:	MOVABLE HOMOLATERAL AXILLARY NODES	
	N1a: NODES NOT CONSIDERED TO CONTAIN GROWTH	RANDOMIZE (*1 & *2)
	N1b: NODES CONSIDERED TO CONTAIN GROWTH	RANDOMIZE (*1 & *2)
N2:	HOMOLATERAL AXILLARY NODES CONSIDERED TO CONTAIN GROWTH AND FIXED TO ONE ANOTHER OR TO OTHER STRUCTURES.	RADICAL MASTECTOMY, UNLESS ASSOCIATED WITH T4a, or T4b THEN PRE-OP. RADIATION THERAPY + RAD. MASTECTOMY
N3:	HOMOLATERAL SUPRACLAVICULAR OR INFRACLAVICALAR NODES CONSIDERED TO CONTAIN GROWTH OR EDEMA OF THE ARM. (NOTE: Edema of the arm may be caused by lymphatic obstruction; lymph nodes may not then be palpable).	Refer to Rx. Guidolines (III-C)
	M- DISTANT METASTASIS	
Mo:	NO EVIDENCE OF DISTANT METASTASIS	RANDOMIZE (*1 & *2)
M1:	DISTANT METASTASIS PRESENT INCLUDING SKIN INVOLVEMENT BEYOND THE BREAST AREA	Refer to Rx. Guidolines (III-C)
**	DIMPLING OF THE SKIN, NIPPLE RETRACTION, OR ANY OTHER SKIN CHANGES EXCEPT THOSE IN T4b, MAY OCCUR IN T1, T2, OR T3 WITHOUT AFFECTING THE CLASSIFICATION.	

*1 & *2 - See instructions on back.

*1. In summary: **Local Surgical Trial:**

a. Conditions for Patient **Eligibility** for Local Surgical Trial:
- –Patient consents to be included in the study
- –Patient's TNM clinical classification is: T1a, T2a, or T3a, and No, N1a, or N1b, and Mo.
- –Patient is 70 years of age, or less
- –Patient is a good surgical risk

b. **Treatments** for Surgical Trial:
- –Radical Mastectomy–if **Year** of Birth is **EVEN**, or
- –Modified Radical Mastectomy–if **Year** of Birth is **ODD**.

*2. In summary: **Local Adjuvant Chemotherapy Trial:**[4,5]

a. Conditions for Patient **Eligibility** for Local Adjuvant Chemotherapy Trial:
- –Patient consents to be included in the study
- Patient's TNM Clinical Classification is: T1a, T1b, T2a, T2b, T3a, or T3b, and No, N1a, or N1b, and Mo.
- –Patient is 70 years of age or less
- –Patient has one or more Pathologically positive axillary lymph node(s) and no other distant metastasis.
- –WBC > 4,000, and Platelet Count > 150,000.
- –Patient has no renal insufficiency' (Renal insufficiency defined as serum creatinine>1.5 mg%).
- –Patient must not be pregnant and reliable means of birth control should be used during the course of Adjuvant Chemotherapy.

b. **Treatments** for Adjuvant Chemotherapy Trial:
- –Melphalan for 1 year post-op. – if **Month** of Birth is **EVEN**
- **–CMF: Cyclophosphamide, Methotrexate, and Fluorouracil for 1 year post-op. – if Month** of Birth: **ODD**

The rationale and additional details of these local surgery and chemotherapy prospective trials are available in two previous publications:

1) Maddox, W. A.; Laws, H. L.; and Carpenter, J. T., Jr., Breast Cancer Management – Part I. J. Med. Assoc. State of Ala. 44:293-302, 1974.

2) Laws, H. L.; Carpenter, J. T., Jr.; and Maddox, W. A. Breast Cancer Management – Part II. J. Med. Asso. State of Ala. 44;481-490, 1975.

Clinical Stage-Grouping in Carcinoma of the Breast:

TIS – Carcinoma-in-situ

Invasive Carcinoma:

Stage I:	T1a NO or N1a T1b NO or N1a	MO
Stage II:	TO N1b T1a N1b T1b N1b T2a or T2b NO, N1a or N1b	MO
Stage III:	any T3 with any N any T4 with any N any T with N2 any T with N3	MO
Stage IV:	any T any N with M1	

I. B. **Treatment for Initial Therapy: Surgical Techniques**

1. The total (simple) mastectomy technique should include total removal of all breast tissue as well as a sample of the axillary node(s).
2. The Modified Radical Mastectomy technique should include total removal of all breast tissue and axillary contents with preservation of both pectoral muscles and a portion of their innervation. The technique of one of us (W.A.M.) was described previously in the second article of this series.[13] Madden's description may, also, be followed. (Madden, J.L.; Modified Radical Mastectomy, Surg. Gynecol. Obstet. 121:1221, 1965)
3. The Radical Mastectomy technique should include sacrifice of both pectoral muscles and the axillary contents. Suitable methods are described by Haagensen,[7] and by Zollinger and Cutler[28], as well as by others.
4. So that the most accurate pathological evaluation may be rendered by the pathologist, it is highly recommended that the surgeon label the lymph node levels by tagging them with markers (level 1 (low), level 2 (mid.), and level 3 (high)), at the time of the surgical removal.

C. **Treatment for Initial Therapy: Special Problems**

1. A patient with an axillary node showing adenocarcinoma consistent with carcinoma of the breast should be treated as having cancer of the breast even in the absence of a discernible primary within the breast.
2. Primary inoperable disease, including inflammatory carcinoma of the breast. The recommended treatment is radiotherapy to the breast for palliation and control of local disease. The usual dosage is a minimum of 5,000 rads in 35 days. Mastectomy for local control of disease may be needed in some cases. After treatment for local control of disease, such patients are then appropriately managed according to the guidelines for recurrent disease section III-D.
3. A primary in each breast without evidence of distant spread (T1, T2, T3, No, N1a or N1b, and Mo) should each be treated as a primary neoplasm.

D. **Treatment for Recurrent (Metastatic) Disease.**

1. General principles of management for recurrent and/or metastatic disease:
   a. The goal of the treatment of recurrent disease is relief of symptoms. Since the treatment is not curative, there is no point in treating asymptomatic disease. The exception is an apparently solitary mestastatic lesion. After evaluation to exclude other metastases, such a lesion should be surgically excised or treated with radiotherapy with intent to cure.
   b. When symptoms are due to disease in a discrete anatomical area, local palliative treatment (usually radiation) of that area is appropriate. When symptoms are due to disease in multiple areas, systemic treatment is appropriate.
   c. Treatment should be delivered in a logical orderly sequence, one modality at a time, so that the effectiveness of each modality can be accurately assessed and the maximum number of beneficial modalities may be delivered in sequence.
   d. Treatment of a subsequent carcinoma in the opposite breast should be managed as a new primary cancer if it does not appear to be metastatic from the first cancer. (i.e. staged clinically by TNM and treated as stated above in II-K. and III-A.)
2. Recommended Treatment for Recurrent and/or Metastatic Disease:
   Menopausal status as described refers to the status of the patient at the time when the diagnosis of recurrent and/or metastatic disease is made:[2,11]
   a. PREMENOAPAUSAL (up to and including one year after the cessation of menses):

Surgical Oophorectomy

Responders

↓ on progression

Adrenalectomy or Hypophysectomy

↓ on progression

Androgens, progesterone

↓ on progression

Combination Chemotherapy

↓ on progression

Experimental Drug(s)

Non-responders

↓ on progression

Combination Chemotherapy

↓ on progression

Experimental Drug(s)

b. **PERIMENOPAUSAL** (1-4 year after cessation of menses): Chemotherapy.
c. **POSTMENOPAUSAL** (4 or more years after cessation of menses):

Oral Estrogens*

Responders

↓ on progression

Estrogen withdrawal

↓ on progression

Adrenalectomy or Hypophysectomy

↓ on progression

Adrogens, Progesterone

↓ on progression

Combination Chemotherapy

↓ on progression

Experimental Drug(s)

Non-responders

↓ on progression

Combination Chemotherapy

↓ on progression

Experimental Drug(s)

*Usual dose for oral estrogens is 15 mg. of diethylstilbestrol p.o. daily; nausea is reduced if the dose is escalated to full dosage over 1-2 weeks.

Combination (not single-agent) chemotherapy should be used in palliation of disease since the response rate is significantly higher. Some objective parameter of disease on examination or x-ray should be followed to gauge the response to therapy.

Late progression of disease can frequently be palliated with:

Androgens (oral)
Progesterone (Megace can be given orally)
Local radiation to symptomatic areas
P-32 for bone pain
General supportive care

E. Treatment for Recurrent (Metastic) Disease: Special Problems

1. Brain metastases should be managed with whole brain irradiation in doses of 3,000-5,000 rads.
2. Patients with liver metastases, severe bone pain in multiple areas, or fulminating recurrent disease should be treated initially with chemotherapy, not endocrine manipulation.
3. Superior vena cava syndrome should be treated on an emergency basis with local radiation.
4. Acute paraparesis due to cord compression from tumor should be treated within 24 hours of onset by emergency decompression and laminectomy. If onset is gradual, local radiation may suffice.
5. Pleural effusions due to local metastases may be treated initially with therapeutic thoracentesis. Usually recurrence will occur rapidly and should be managed in the following definitive manner.
   a. Tube thoracostomy with closed drainage of as much fluid as possible.
   b. Instillation into the pleural space of 10-15 mg. nitrogen mustard (this agent is preferred; dose should not exceed 0.4 mg./kg.) or other suitable sclerosing agent such as atabrine. The nitrogen mustard should be given immediately after mixing since all activity is lost within 10 minutes after mixing; it is conveniently diluted in about 50 ml. saline. Immediately after the drug is instilled, the patient should be thoroughly rotated for the next few minutes to spread the sclerosing agent over the entire pleural surface.
   c. Resumption of closed water-seal drainage for 48-72 hours. This should prevent rapid reaccumulation of fluid and allow the visceral and parietal pleural surfaces to adhere and obliterate the pleural space.
6. Pathologic fractures and/or incipient bone areas with pain.[1,8,20,22,23]
   a. Ribs, vertebrae and small bones require symptomatic treatment only. If symptoms are severe, local radiation is appropriate.
   b. Femur: small metastatic lesions without fracture should be treated as under "a." Fractures should be treated operatively with metal stabilization and methylmethacrylate packing of the cortical area, followed by local radiation therapy. If a lesion equal to or greater than 2.5 cm in diameter is present in the subtrochanteric area, the likelihood of subsequent fracture is great; such lesions should be treated prophylactically in the same way as fractures are. If the femoral neck is involved, prosthetic hip replacement is indicated.
   c. Humerus: should probably receive the same management as femur.

V. NURSING CARE

A. Pre-Operative

Pre-operative nursing care for breast cancer patients should include patient teaching and emotional suport. The nurse should reinforce the physician's instructions to the patient and discuss the expected post-operative course with the patient and her family to help allay fears and anxieties.

B. Post-Operative Nursing Care

1. Routine post surgical care should include:
   a. Insuring proper management of surgical dressing.
   b. Encouraging the patient to frequently cough and deep breathe.
   c. Checking the patency of suction catheters which are inserted under the skin flaps and recording the type and amount of drainage from these catheters at regular time intervals.
   d. Encouraging the patient to be out of bed and ambulating as soon as possible.
2. The patient should be instructed to avoid abducting the arm on the operative side for approximately 7 to 14 days after surgery, or until the surgeon feels the surgical wound is healing well and the skin flaps are intact.
3. The nursing personnel should remind the physician about Research to Recovery Volunteers.
4. Discharge planning should begin several days before discharge from the hospital. If the patient needs assistance with matters in which a social worker can be of help, the nurse should make arrangements for a social worker to visit the patient while she is hospitalized. It should be explained to the patient that her physician and/or Reach to Recovery Volunteer will help her make arrangements to be fitted with a prosthesis when the physician feels she is ready. The nurse should be sure the patient understands her discharge orders and that she has an appointment to see her physician in several weeks.

C. Out-Patient Care (ABCP nurses)

Nursing consultation and personal visitation are available through the ABCP office to assist physicians and their nurses in implementing specific details in the management of breast cancer patients. Please telephone via Mist Line and ask for the Alabama Breast Cancer Project.

V. PATHOLOGY GUIDELINES AND PROCEDURES

A standard procedure for the management of breast cancer specimens is being studied by the Alabama Association of Pathologists. The details listed here[21] will be utilized at the University of Alabama in Birmingham. The pathology examination will include:

A. Type of specimen: radical mastectomy (R.M.), modified mastectomy (M.M.) or total mastectomy (T.M.).
B. External appearance of breast (nipple retraction, ulceration, pigskin, etc.).
C. Site of the tumor: It is preferred that the surgeon provide such information. The pathologist in turn will determine the exact site as to distance from the nipple, skin and underlying fascia. It is also preferred to have the specimen x-rayed in order to compare with those of mammography findings.
D. Size of tumor: It is recommended to have three-dimensional measurement, rather than one dimension. The lesion is to be placed into one of four categories: less than 0.5 - 2.0 c.m., 2.0 - 5.0 c.m., and more than 5.0 cm. in greatest dimension.
E. The presence of another breast tumor, its size and location.
F. Microscopic examination of the apparently normal breast tissue away from the main tumor, sections to be taken from:
   1. Upper lateral quadrant
   2. Lower lateral quadrant
   3. Central zone
   4. Upper inner quadrant
   5. Lower inner quadrant
   6. Cross sections of lactiferous ducts just below the nipple
   7. Serial sections of the nipple
   8. Sections of deep margin (deep fascial), especially if the specimen is M.M. or T.M.
   9. Sections of skin above the tumor.
   10. All lymph nodes submitted. It is preferred that the surgeon marks the level of lymph nodes during surgery.

The pathology final diagnosis is to include:

A. Type of cancer (classified according to A.F.I.P. fascicles.)
B. Margin of the tumor (pushing versus infiltrating).
C. Involvement of the nipple and permeation of the ductal system.
D. Permeation of periductal lymphatics.
E. Status of the apparently uninvolved ipsilateral breast tissue as to the presence of other pathology.
F. Vascular invasion.
G. Number of lymph nodes dissected and the number of involved nodes. The lymph node involvement should be designated as level I, II, and III.

ABC PROJECT PATHOLOGY REVIEW SERVICE:

The ABC Project will offer a pathology review service. A representative slide of the primary lesion and othe pertinent sections from the specimen should be forwarded to the ABC Project pathologist for review. (Box 193 University Station, Birmingham, Alabama 35294) The results of this review will be sent back to the referrin pathologist, and in instances where there are differences of opinion relative to the interpretation a second referee' opinion will be obtained.

VI. REHABILITATION

Physicians are encouraged to become familiar with and to utilize available resources relative to the rehabilitation o their breast cancer patients. The ABC Project staff is available via the Mist Line to assist with individual patients an to provide general information. By way of example, the following may be available in different geographic area o the State:

A. American Cancer Society general programs include:
   1. Reach to Recovery Volunteers[12]
   2. Professional Educational Materials
   3. Lay educational materials such as the self breast examination brochure
   4. Financial assistance for patient care

B. Services of Registered Physical Therapists:
   1. Department of Physical Therapy in local hospitals.
   2. For a list of Registered Physical Therapists in any area of Alabama write to: Alabama Chapter o the American Physical Therapy Association, Rotary Rehabilitation Center, 1874 Pleasant Avenue Mobile, Alabama 36617.

C. The Department of Physical Therapy, University of Alabama Hospital and Clinics, University of Alabama ir Birmingham, Medical Center, will conduct a special study at University Hospital relative to the pre an post-operative physical rehabilitation of mastectomy patients. For interested physicians, the details of thi program may be obtained by calling the ABC Project Office via the Mist Line or by contacting th Chairman of the Department of Physical Therapy, U.A.B. (205-934-3566).

D. The Rehabilitation Project of the Cancer Research and Training Center, University of Alabama ir Birmingham offers services relative to cancer rehabilitation. Essentially, the program at U.A.B. include assignment of one "Care Counselor" to each patient to serve on a one to one basis as a patient advocate The "Care Counselor" is responsible during the patient's hospitalization and after discharge for 1) assurin good physical rehabilitation 2) providing patient and family education 3) assisting with problems created b the diagnosis of cancer as well as with problems relative to the health care delivery system, and 4 coordinating all other supportive services.

   These may include, by way of example, transportation, financial assistance, vocational rehabilitation, an pastoral counselling, if needed. Any physician in the State desiring assistance relative to patien rehabilitation should contact the ABC Project Office or the "Care Project" via the MIST LINE.

E. Management of Frozen Shoulder:

   It is anticipated that this situation will occur infrequently with adequate rehabilitation; however, th management of a patient with a "frozen shoulder" would include the following:

   1. Treat initially with local injections of long acting corticosteroids into the area of maximun tenderness or into the shoulder joint. This should be followed up with active range of motio exercises taught by and supervised by the Physical Therapy Department.
   2. In the event a patient's shoulder is resistant to the above treatment, then manipulation unde anesthesia may be indicated with or without steroid injection at the time of manipulation an subsequent range of motion exercises. Physical therapy, if available, may be very helpful.

VII. PATIENT FOLLOW-UP

The chart below summarizes suggested follow-up times and routine procedures for all breast cancer patients. In the event of recurrence, subsequent treatment will be at the discretion of the individual physician, though advisory aid will be available if desired.

FOLLOW-UP SUMMARY CHART

MONTHS	3	6	9	12	15	18	21	24	27	30	33	36	42	48	54	60	66	72	78	84	90	96	108	120
Hx. & P.E.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pelvic				✓				✓				✓		✓		✓		✓		✓		✓	✓	✓
Chest Film		✓		✓		✓		✓				✓		✓		✓		✓		✓		✓	✓	✓
Mammogram								✓								✓								
SMA-12				✓				✓				✓		✓		✓		✓		✓		✓	✓	✓
CBC & Platelets				✓				✓				✓		✓		✓		✓		✓		✓	✓	✓
Bone X-ray	p.r.n. symptoms																							

APPENDIX "A"

U.A.B. LOCAL STUDY IN BONE SCINTIGRAPHY

Because bone scintigraphy is one of the newer diagnostic techniques in the evaluation of patients with breast cancer, its place in management remains somewhat unclear. In an effort to gain information which will help to define its place in demonstrating the extent of disease, bone scintigraphy will be done in the following systematic maner at U.A.B.:

1. Initial Staging of Disease

   All patients with lesions highly suspicious of being breast cancer will be referred to the Department of Nuclear Medicine for imaging before operation. Those not scanned pre-operatively but who receive definitive operative treatment for breast cancer will be referred for imaging in the immediate post-operative period. Scintigraphy will be done during the initial hospitalization for definitive treatment. Patients from other institutions may also be referred to U.A.B. for imaging.

   When scintigraphic images are positive, radiographs of positive areas will be carried out. If both procedures indicate that metastatic disease is present, further confirmation will not be necessary. When scintigraphs only are positive, bone biopsy of the involved area(s) should be attempted. If lesions are inaccessible, biopsy of the iliac crest will be done. These biopsies should provide histologic answers to the question of the significance of positive areas of uptake on scintigraphs.

   Data obtained from scintigraphy will also be compared to and correlated with the results of other evaluation data and the results of treatment.

2. Follow-Up Data

   a. Patients Whose Initial Scintigraphs are NEGATIVE:

      It may be desirable to obtain follow-up scintigraphs on such patients at some later date. This is not standard clinical practice at present. Even the demonstration of metastatic disease in bone which is asymptomatic, would in most instances, not change the management of the patient. Therefore, the routine use of scintigraphs in post operative follow up in the absence of some symptoms would at the present time be considered research. Should funds become available we would like to repeat scintigraphs at 2 and 5 years to further evaluate this technique and its usefulness.

   b. Patients Whose Initial Scintigraphs are POSITIVE, but in Whom No Radiographic or Histologic Evidence of Metastatic Disease is Obtained:

      Such patients will be followed closely with bone scintigraphs at six month intervals for two years, then annually for five years. The principal reason for close follow-up will be to determine what proportion of patients with initially positive images will eventually develop more obvious bony metastases.

APPENDIX "B"

U.A.B. LOCAL STUDY FOR BIOPSY OF CONTRALATERAL BREAST

Guidelines for Biopsy of Contralateral Breast:

1. Biopsy of the contralateral breast will be done for the following:
   a. Patients less than age 60 with lobular carcinoma of the breast.
   b. Patients less than age 60 with any two of the following with carcinoma of the breast: siblings, mother, aunt(s), daughter(s).
   c. Patients less than age 55 with clinically negative nodes.
   d. Patients with multiple foci of cancer in the original operative specimen.
2. Every effort will be made by the surgeon to identify any suspicious areas in the opposite breast by clinical examination and by mammography. If neither of these diagnostic methods identify a suspicious area to biopsy, a generous biopsy of the upper outer guadrant of the opposite breast will be done.
3. Specimen radiography and meticulous examination by the pathologist to identify in-situ or invasive carcinoma will be made.

We thank the following people from the University of Alabama in Birmingham for their assistance with the Alabama Breast Cancer Project: Dr. Ben V. Branscomb, Miss Mary Conley, Miss Marilyn Gossman, Mr. Bob Harden, Dr. David Hurst, Dr. Emanuel Mesel, Mrs. Liz Anne Gray, Miss Diane Miller, Dr. Tariq Murad, Miss Jennifer Y. Kim, Dr. Kurt M. W. Niemann, Miss Joanie Pigford, Dr. Robert E. Roth, Mr. S. J. Soong, Dr. Welby Tauxe, Dr. David Witten, and Mrs. Sandy Wolanski, as well as the Advisory Committee Members.

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New Techniques, New Headaches

Albert Barrocas, Lt. Col., USAF, MC*

The adoption of new technology in medicine is associated with progress; however, it is also accompanied by undesirable side effects. Since the re-establishment of U.S. relations with Red China in 1972, the techniques of acupuncture have disseminated through all parts of the U.S. Recently, a patient presented to our clinic exhibiting a complication from this new treatment modality.

Case Presentation

Captain K. is a 30-year-old Laotian officer, who presented with a one year history of back pain compatible with lumbosacral sprain. He had been treated with acupuncture for approximately three months while in Laos. Because of persistent back pains, lumbosacral spine films were obtained revealing a retained portion of a metallic foreign body compatible with an acupuncture needle. (Figures 1 & 2) Though the patient was reassured that the needle was probably not the source of his persistent back pain, he was most anxious and requested that the fragment be removed.

After carefully measuring the probable localization of the needle on the initial films, lead markers were placed on the skin to more accurately localize the area of the needle topographically. (Figures 3 & 4) Under local anesthesia, using a transverse incision, the needle fragment was removed without difficulty. (Figure 5) Postoperatively, the patient did well, though it is yet too early to determine what effect, if any, the embedded needle fragment contributed to his discomfort.

Discussion

Acupuncture is blossoming in this country with some mixed results being reported. Conditions from arthritis to obesity are being managed by this modality with dramatic anecdotal results. The needles employed are usually made of silver or gold, and while they may be solidly constructed the potential for breakage with resultant retained fragment should be borne in mind. While this will prove to be an extremely rare complication, *the above case points to the fact that no technique is devoid of complication.*

To the author's knowledge, this complication has not yet been reported in the American literature. Whether the retained fragment needs removal will depend a great deal on its location, symptomatology and frame of mind of the patient. Medico-legal questions may arise from this problem.



FIGURE 1

FIGURE 2



***Former Chief, Surgical Services, USAF Regional Hospital, Maxwell AFB, Alabama.**

FIGURE 3



FIGURE 4



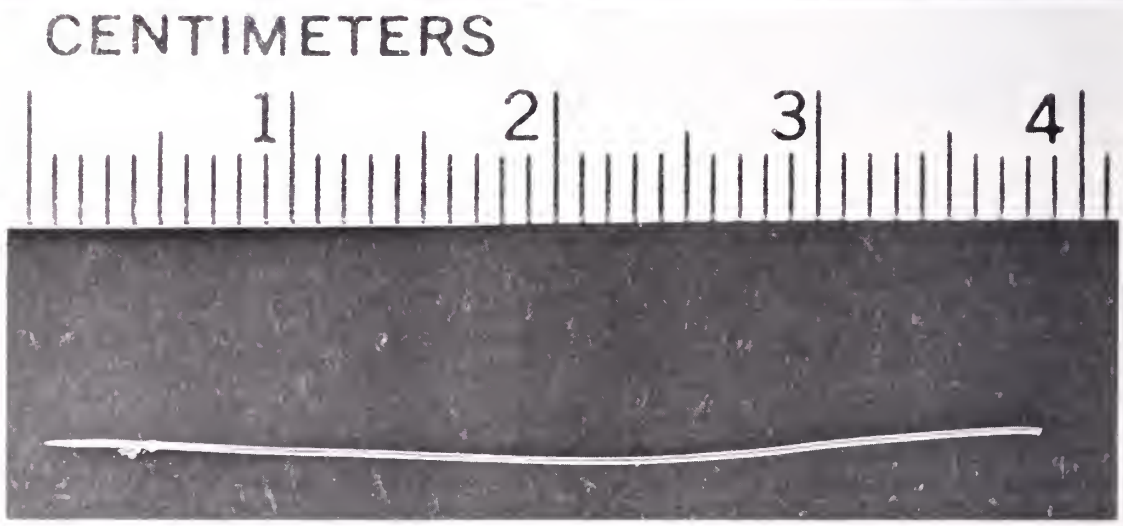


FIGURE 5

The removal of these metallic fragments should be approached with good preoperative biplanar localization, if possible, by the use of radiopaque markers such as lead impregnated rubber or needles. At surgery, metallic detectors should be available, and if the fragment is not readily localized, intraoperative x-rays with sterile needles for localization should be utilized.

Summary

With the advent of acupuncture, the potential, heretofore unreported, complication or retained needle fragment exists. A case report is presented illustrating alternative ways or preoperative localization. While the routine removal of these fragments is not advocated, the individualization of each case is necessary.

Transactional Analysis For The Physician: The Ego States And Psychopathology

Taras J. Cerkevich, Ph.D.*

This is the second in a series of articles on transactional analysis designed to acquaint the physician with the basics of the theory. The thrust of the series is to present useful techniques the physician may use in dealing with the games, plays and manipulations that "troublesome" patients present. By means of this series, the physician will have the opportunity to learn to feel more comfortable and relaxed, not only at the office, but also at home with the family.

In the first article in this series, a general introduction to Eric Berne's system was given. In this article, I will discuss Eric Berne's conceptualization of the ego. It must be emphasized that Berne's psychology is an "ego psychology", in contrast to a "depth psychology." Figure 1 readily illustrated the subject matter of Eric Berne's theory and its relationship to traditional psychoanalysis.

The Ego States

Berne conceived of the ego as composed of three states: a Parent, an Adult and a Child. (Parent, Adult and Child refer to ego states while parent, adult and child refer to roles). An ego state is a consistent pattern of experience and feeling with a corresponding pattern of behavior. The first ego state to develop is the Child. As the child grows older, he or she develops the Parent ego. Thereafter, as the child attempts to make sense of his or her feelings and of the world, the child develops an Adult ego state. When an individual acts in a Parent manner, he or she speaks, acts, feels and experiences in the same manner that his or her parents and parental figures (such as teachers, uncles, elder siblings, minister, etc.) did. The Parent ego state contains the traditions and expectations of the individual's culture and subculture. The Parent ego state contains the "shoulds" "oughts" and "musts" that are handed down from parent to child.

In addition, the Parent ego state is the source of nurturing and helping behaviors. Parent ego state behavior can also be characterized by condescension, accusation, criticism and moralization. A pointing finger, a threatening frown and an authoritative tone of voice are often additional components of Parent behavior. Children who, in their psychological development, have missed the experience of one of the parents through death, desertion or psychological absence often have an "underdeveloped" Parent ego state. As children, people in this situation will create an ideal, imaginary parent who is all good and all loving. As adults, they hop from job to job and marriage to marriage in search of the love the missing parent never gave them.

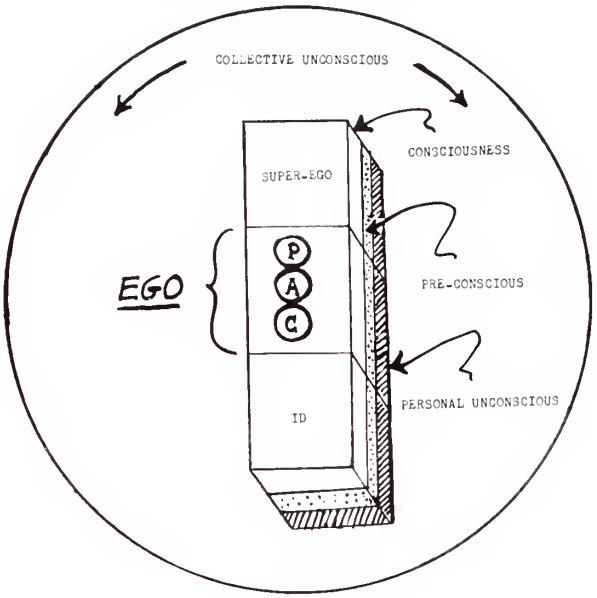


FIGURE 1
In contrast to the depth psychologies of Freud and Jung, for example, who dealt with the personal unconscious and collective unconscious, respectively, Berne's psychology deals with the ego.

The Adult ego state is that part of the ego which deals with data gathering, reality testing, computation, information processing and the like. The Adult ego state maps out plans of action and can be thought of as the executor of personality. The Adult has the potential to cathect over Child feelings (pathos) and Parent dogmas (ethos). Successful psychotherapy strengthens the Adult's position as executor of personality. In retarded individuals, the Adult ego state is defective.

The Child ego state is that which an individual is born with. It is the feeling and intuitive part of the personality. When its needs are met, the Child ego state is affectionate and sensuous. It acts spontaneously and smiles and laughs with pleasure when it is loved. However, when its need to survive is threatened, when the individual's stroking needs are not met or when pain is imminent, the Child ego state

*Clinical Psychologist, Mobile.

respond with fear, anger, rebellion, self-centeredness and aggression. While proper channeling of anger and aggression are necessary for proper socialization and healthy psychological adjusting, complete elimination of these behaviors in children produces an individual who is extremely submissive and complaint.

On the other hand, there are some children who would indeed perish unless they did demand attention and act aggressively. The Child ego state is open to all feelings, both positive and negative and starts life with the assumption that "I'm OK and You're OK." Through the course of its development, the child adapts to it's parent's permissions, injunctions and attributions and learns how to earn pleasant strokes and how to avoid negative strokes. In so doing, the child may adapt one of three possible alternate positions in life: I'm not OK–You're OK; I'm OK–You're not OK or I'm not OK–You're not OK. If the child does assume one of these other positions, the Child ego state learns to collect certain not-OK feelings that are earned by playing psychological games. Although the Child ego state may figure out decisive psychological games through its own intuition, many psychological games are adapted from the parents. The Child ego state, although it has the potential to bring joy into an individual's life, is often the troubled part of the personality.

In conceptualizing ego states, two points must be emphasized. First of all, the term Parent, Adult and Child are independent of age and role status. Rather, the ego states are *modes of behavior.* A child of two has already developed its three ego states. A 65-year-old person still has a Child ego state and a person who has never played the role of parent has a Parent ego state. A parent may act in a Child manner and have a child who may have to act in a Parent manner toward it's parents, as in the case of the mother who is dependent on her daughter. The terms "parent", "adult" and "child" refer to roles that society casts upon people. The role of "parent" occurs when an individual has children. The parent may execute his duties by acting in a Parent, Adult or Child manner. The role of "child" is usually defined by statute as an individual under the age of 19. The child may act in a Parent, Adult or Child manner, depending on the situation. An "adult" is usually defined by Alabama statute as one older than 19 years of age. However, whether the adult acts as a Parent, Adult or Child depends not on that person's age, but rather on how he or she has been trained to react to a particular event.

Secondly, although the ego states may be conceptualized as three separate person's each with it's own characteristic mode of behavior, the ego states are not homunculi over which the individual has no control. People can control their behavior and the purpose of transactional therapy is to teach people to manage their ego states, their modes of behavior.

The Ego States And Psychopathology

Analyzing behavior in terms of ego states simplifies the conceptualization of psychopathology. TA recognizes four major dysfunctions of the ego states: lax, rigid, lesioned and contaminated. Ego states have boundaries and the ego boundaries are semi-permeable, i.e., energy can flow from one ego state to another as needed. An individual, then, can

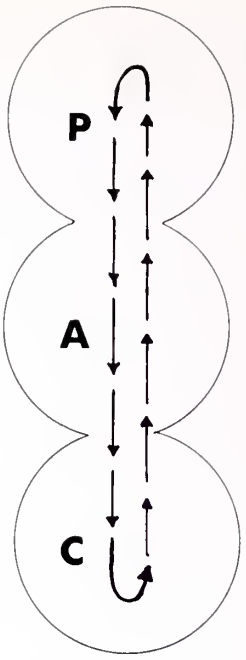


FIGURE 2

LAX EGO BOUNDARIES.
The flow of energy within the ego is too rapid.

adapt his or her behavior to the requirements of a particula situation. However, occasionally, the ego boundaries be come "lax" and the flow of energy is too rapid. Behavioral ly, such an individual would be described as "unpredict able" or "unstable" and in severe cases as "manic." Figur 2 illustrates this situation.

When ego boundaries are rigid, the flow of energy fron one ego state to another is hampered and energy is boun up in one ego state. Behavior then becomes stereotyped an fixated in Parent, Adult, or Child modes, depending on th type of rigidity. Figure 3 illustrates this type of situation In the situation of the Constant Parent, the individual i fixated in Parent modes of behavior. If the prevailin attitude of the Parent is one of criticism and dogma, w may expect an individual who bullies, criticizes quickly an unjustly, moralizes, and knows-it-all. Such a person woul most often be found in positions such as generals, colonels certain types of ecclesiastics, bank presidents and othe powerful administrative positions. If the prevailing attitud of the Parent is one of nurturance, the person fixated in th

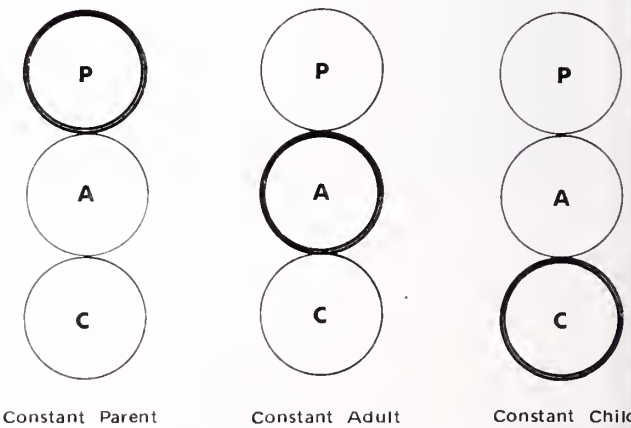


FIGURE 3
RIGID EGO BOUNDARIES
The flow of energy is fixated and bound in one ego state.

Parent ego states will act the part of a benevolent despot, always "helping" and rescuing and then persecuting when "help" is not accepted. They keep people dependent upon themselves, oftentimes going out of their way to "help."

In the case of the Constant Adult, the individual is fixated in Adult modes of behavior. Little or no emotion is shown. The person deals with facts, figures and work, and allows little leeway for feelings or fun. Rationalization and intellectualization are common. People who are fixated in the Adult ego state often work as mathematicians, chemists, statisticians and other research professions.

When an individual is fixated in Child modes of behavior as in the case of the Constant Child, any variety of behaviors may occur depending on the types of adaptations the Child has learned. Some examples of Constant Child behavior include rebellion and aggression, withdrawal and isolation, eternal procrastination, submissive compliance and its ungraceful variations of sulking and pouting, and self-victimization. People fixated in the Child ego state often speak in a high-pitched voice garnished with childish vocabulary and intonation. In extreme cases, the person may develop the behavioral syndrome known as "hebephrenia."

Ego boundaries may also develop lesions, as illustrated in Figure 4. People with ego boundary lesions are characterized by an over-reaction to the reality of a stimulus. They exhibit uncontrollable, irrational outbursts of emotion, e.g., acute anxiety attacks at the sound of thunder, deep and long lasting depression at a minor criticism and the like.

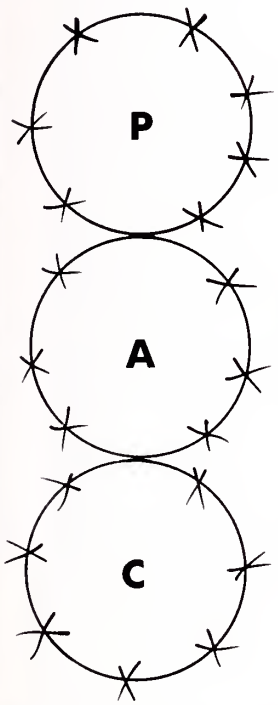


FIGURE 4
LESIONED EGO BOUNDARIES

Lesions can occur in any or all of the ego states. Lesions may be thought of as "sore spots" in ego functioning.

Finally, the Adult ego state may be contaminated by one or both of the other states. When the Parent ego state contaminates Adult thinking, the individual blindly accepts prejudicial ideas and opinions that have been handed down from parent to child without any Adult scrutiny as to their validity. This situation is illustrated in diagram (a) of Figure 5. Examples of this type of contamination may be

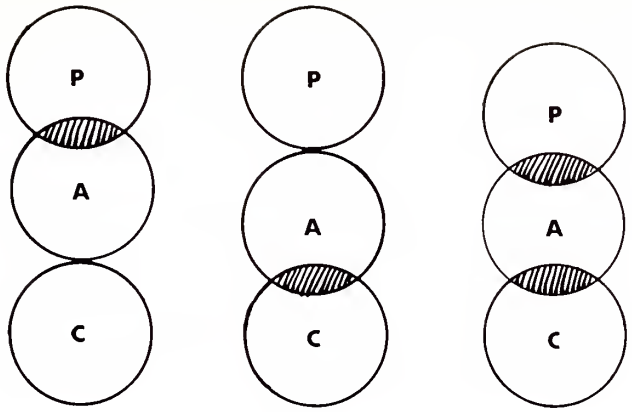


FIGURE 5
CONTAMINATION OF THE ADULT EGO STATE

Diagram (a) portrays contamination of the Adult by the Parent. Diagram (b) portrays contaimination of the Adult by the Child and (c) portrays contamination of the Adult by both the Parent and Child.

characterized by such statements as, "Blacks are inferior to whites...Women can't be trusted...Everybody over 30 stinks..." In extreme cases, when the Adult ego state is completely unable to cathect over the Parent, the individual may experience auditory and/or visual hallucinations. Contamination from the Child ego state is portrayed in diagram (b) of Figure 5. In this situation, the Adult believes such Child delusions as "I am worthless...The world owes me a living...Nobody loves me...Someday I'll be rescued..." In severe cases, the Adult may delusionally believe that the individual is God, that he or she is persecuted, that he may be Napolean, or the like. Diagram (c) of Figure 5 illustrates a situation in which the Adult ego state is contaminated by both the Child and Parent.

Summary

In this article, the structure of the ego as conceptualized by Eric Berne was discussed. An analysis of psychopathology in terms of the ego states was also made. The next article in this series will concern iteself with how people structure time and how it is possible to study interpersonal behavior in terms of ego states.

Grateful thanks to Fred Marchman for illustrating this series.

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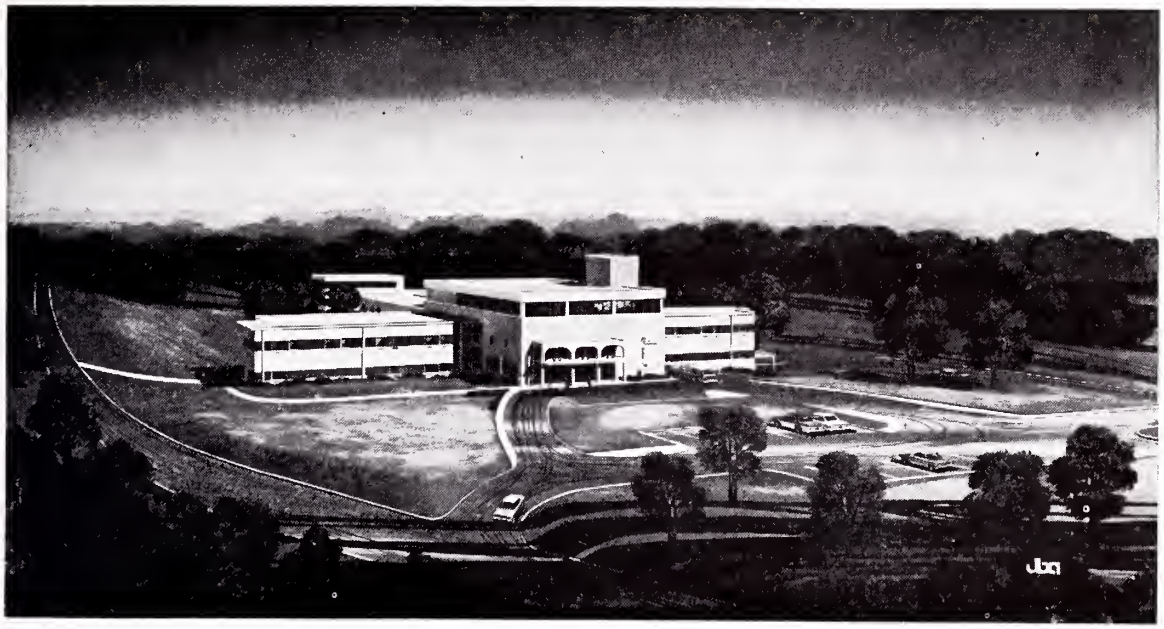
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Dean's Report

G. Gayle Stephens, M.D.
Dean, UAH School of Primary Medical Care

UAH COMMITTED TO EDUCATION IN PRIMARY CARE SPECIALTIES

Alabama is unique among the 50 states in its efforts to expand its medical education programs to meet the medical needs of its citizens. Not only has the total number of medical students been dramatically increased, but major commitments have been made to education for the primary care specialties.

The School of Primary Medical Care (SPMC) is a part of both these efforts. Authorized and funded in 1971, this school is developing as a clinical branch of the University of Alabama School of Medicine and is physically based in Huntsville as one of five schools within The University of Alabama in Huntsville. Fiscally, SPMC is a line within the UAH budget and academically the program is accredited as part of the University of Alabama System Medical Education Program headed by S. Richardson Hill, Jr., M.D., and James A. Pittman, Jr., M.D., in Birmingham.

Under present plans, SPMC is authorized to train 50 medical students per year – 25 juniors and 25 seniors. These students are all processed by the Admissions Committee at UAB. Our first class of 20 juniors entered in September, 1974, and will graduate in May, 1976. All transfers are voluntary and the appeal is to students whose main interest is clinical practice in one of the primary care disciplines. Upon graduation the student may, however, enter any approved residency program in any specialty.

The medical student program provides clinical clerkships in Internal Medicine, Pediatrics, Obstetrics/Gynecology and Psychiatry. The hospital-based teaching is done mainly in Huntsville Hospital. In addition to the hospital-based clerkships, there are two other academic programs distinctive to the mission of the School – the Community Medicine Program and the Family Medicine Clerkship. Community Medicine is taught partly in the classroom and partly in various community agencies and facilities in Huntsville and the surrounding region. These experiences are closely related to the student experiences in Pediatrics and Family Medicine. The Family Medicine Clerkship is a longitudinal experience throughout the entire year of Phase II. In this program, the student is assigned a local family physician as an advisor-preceptor in whose office practice the student spends a half day each week. There is als weekly conference on ambulatory care clinical problems.

A final component of the medical student program related to those academic disciplines considered basic primary medical care. These include not only clini aspects of the traditional basic medical sciences, but a material from the academic social sciences, administrat sciences and a series of special topics including hum nutrition, human sexuality, and death and grief. Th non-clerkship components of the curriculum are presen on Thursday afternoons weekly.

The faculty currently consists of 28 paid memb (full-time or part-time) and 124 volunteers from Huntsv and the North Alabama region. These teachers provide only clinical supervision, but also formal conferences a seminars which are intended, among other things, prepare the students to pass the Part II examination of National Board of Medical Examiners.

The location of the School is in the Medical District Huntsville where a 52,000 square foot Ambulatory C Center has been provided adjacent to Huntsville Hospi Most of the physicians' offices are also in the District.

We accept as the mission of the School to tr physicians for the State of Alabama who will practice areas of need those clinical disciplines most appropriate the need, i.e., family practice, internal medicine, pediatr and Ob/Gyn. We accept a special regional responsibility provide physicians for the 13-county North Alaba region.

An essential element in carrying out this mission is t Family Practice Residency which is co-sponsored by SPMC and Huntsville Hospital. This residency, begun 1973, currently has 20 residents and will graduate family physicians by the end of 1977.

In future reports, we will describe in more detail speci aspects of the School. In the meantime, we welco inquiries and visits from members of MASA. In the deep sense, this is your School and we will do everything we c to live up to the highest standards of medical education a to work with physicians in the State to meet our comm goals.

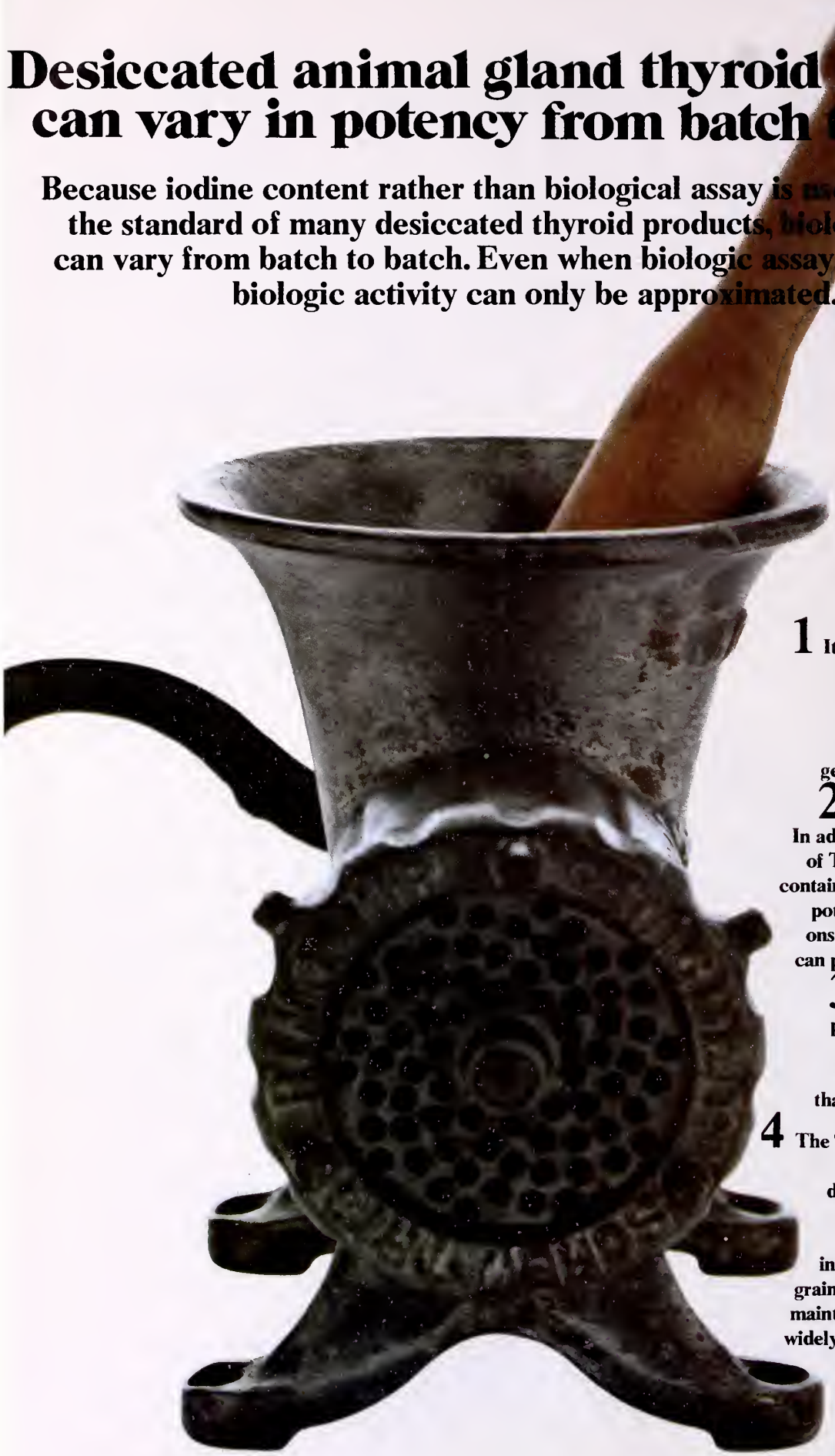
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3 Even when kept under proper storage conditions, desiccated thyroid deteriorates more rapidly than the synthetic hormone.

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1. Armour Thyroid (Tablets). 1975 Physicians' Desk Reference. p. 561.
2. Proloid® (thyroglobulin). 1975 Physicians' Desk Reference. p. 1575.

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4 A recent study of 44 patients with hypothyroidism indicates that 89 percent of the patients were maintained with doses of L-thyroxine (SYNTHROID) between 100 mcg. and 200 mcg. (0.1 mg. and 0.2 mg.) per day.[3]

3. Stock, J.M., Surks, M.I., and Oppenheimer, J.H.: Replacement dosage of L-thyroxine in hypothyroidism. A re-evaluation. New Engl. J. Med. *290*:529-33, 1974.

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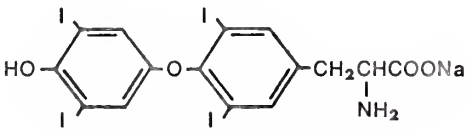
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Description

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Sodium Levothyroxine

Actions

SYNTHROID (sodium levothyroxine) **Tablets**, taken orally, provide hormone that is readily absorbed from the gastrointestinal tract. SYNTHROID **Injection** is effective by any parenteral route. Following absorption, the synthetic L-thyroxine provided by SYNTHROID products cannot be distinguished from L-thyroxine that is endogenously secreted. Each is bound to the same serum proteins and each exhibits a six to seven day circulating half-life in the euthyroid individual.

Both SYNTHROID products will provide L-thyroxine as a substrate for physiologic deiodination to L-triiodothyronine. Therefore, patients taking SYNTHROID products will demonstrate normal blood levels of L-triiodothyronine even when the thyroid gland has been surgically removed or destroyed by radioiodine. Administration of levothyroxine alone will result in complete physiologic thyroid replacement.

Indications

SYNTHROID (sodium levothyroxine) products serve as specific replacement therapy for reduced or absent thyroid function of any etiology. SYNTHROID **Injection** can be used intravenously whenever a rapid onset of effect is critical, and either intravenously or intramuscularly in hypothyroid patients whenever the oral route is precluded for long periods of time.

Contraindications

There are no absolute contraindications to SYNTHROID (sodium levothyroxine) therapy. Relative contraindications include acute myocardial infarction, uncorrected adrenal insufficiency and thyrotoxicosis. (See WARNINGS)

Warnings

Patients with cardiovascular diseases warrant particularly close attention during the restoration of normal thyroid function by any thyroid drug. In such cases, low initial dosage increased slowly by small increments is indicated. Occasionally, the cardiovascular capacity of the patient is so compromised that the metabolic demands of the normal thyroid state cannot be met. Clinical judgment will then dictate either a less-than-complete restoration of thyroid status or reduction in thyroid dosage.

Endocrine disorders such as diabetes mellitus, adrenal insufficiency (Addison's disease), hypopituitarism and diabetes insipidus are characterized by signs and symptoms which may be diminished in severity or obscured by hypothyroidism. SYNTHROID (sodium levothyroxine) therapy for such patients may aggravate the intensity of previously obscured symptoms and require appropriate adjustment of therapeutic measures directed at these concomitant disorders.

Thyroid replacement may potentiate the effects of anticoagulants. Patients on anticoagulant therapy should have frequent prothrombin determinations when instituting thyroid replacement to gauge the need to reduce anticoagulant dosage.

Precautions

Overdosage with any thyroid drug may produce the signs and symptoms of thyrotoxicosis, but resistance to such factitious thyrotoxicosis is the general rule. With SYNTHROID (sodium levothyroxine) **Tablets**, the relatively slow onset of action minimizes the risk of overdose but close observation in the weeks following institution of a dosage regimen is advised. Treatment of thyroid hyperactivity induced by oral medication is confined to interruption of therapy for a week, followed by reinstitution of daily therapy at an appropriately reduced dosage.

Adverse reactions

Adverse reactions are due to overdose and are those of induced hyperthyroidism.

Dosage and administration

For most adults, a final dosage of 100 mcg (0.1 mg) to 200 mcg (0.2 mg) of SYNTHROID (sodium levothyroxine) **Tablets** daily will restore normal thyroid function and only occasionally will patients require larger doses. Failure to respond adequately to a daily oral intake of 400 mcg (0.4 mg) or more is rare and should prompt reconsideration of the diagnosis of hypothyroidism, special investigation of the patient in terms of malabsorption of L-thyroxine from the gastrointestinal tract or poor adherence to therapy.

The concomitant appearance of other diseases, especially cardiovascular diseases, usually dictates a replacement regimen with initial doses smaller than 100 mcg/day (0.1 mg).

In otherwise healthy adults with relatively recent onset of hypothyroidism, full replacement dose of 150 mcg (0.15 mg) or 200 mcg (0.2 mg) has been instituted immediately without untoward effect and with good therapeutic response. General experience, however, favors a more cautious approach in view of the possible presence of subclinical disorders of the cardiovascular system or endocrinopathies.

The age and general physical condition of the patient as well as the severity and duration of hypothyroid symptoms determine the starting dosage and the rate of incremental dosage increase leading to a final maintenance dosage. In the elderly patient with long standing disease, evidence of myxedematous infiltration and symptomatic, functional or electrocardiographic evidence of cardiovascular dysfunction, the starting dose may be as little as 25 mcg (0.025 mg) per day. Further incremental increases of 25 mcg (0.025 mg) per day may be instituted at three to four week intervals depending on patient response. Conversely, otherwise healthy adults may be started at higher daily dosage and raised to the full replacement dosage in two to three weeks. Clearly it is the physician's judgment of the severity of the disease and close observation of patient response which determines the rate of dosage titration.

Laboratory tests to monitor thyroid replacement therapy are of limited value. Although measurement of normal blood levels of thyroxine in patients on replacement regimens frequently coincides with the clinical impression of normal thyroid status, higher than normal levels on oral replacement of levothyroxine occasionally occurs and should not be considered evidence of overdosage per se.

In all cases, clinical impression of the well-being of the patient takes precedence over laboratory determination in determining the appropriate individual dosage.

In infants and children, there is a great urgency to achieve full thyroid replacement because of the critical importance of thyroid hormone in sustaining growth and maturation. Despite the smaller body size, the dosage needed to sustain a full rate of growth, development and general thriving is higher in the child than in the adult, as much as 300 mcg (0.3 mg) to 400 mcg (0.4 mg) per day.

In myxedema coma or stupor, without concomitant severe heart disease, 200 to 500 mcg of SYNTHROID **Injection** may be administered intravenously as a solution containing 100 mcg/ml. Although the patient may show evidence of increased responsivity within six to eight hours, full therapeutic effect may not be evident until the following day. An additional 100 to 300 mcg or more may be given on the second day if evidence of significant and progressive improvement has not occurred. Like the oral dosage form, SYNTHROID **Injection** produces a predictable increase in the circulating level of hormone with a long half-time. This usually precludes the need for multiple injections but continued daily administration of lesser amounts intravenously should be maintained until the patient is fully capable of accepting a daily oral dose.

In the presence of concomitant heart disease, the sudden administration of such large doses of L-thyroxine intravenously is clearly not without its cardiovascular risks. Under such circumstances, intravenous therapy should not be undertaken without weighing the alternative risks of the myxedema coma and the cardiovascular disease. Clinical judgment in this situation may dictate smaller intravenous doses of levothyroxine.

SYNTHROID **Injection** by intravenous or intramuscular routes can be substituted for the oral dosage form when ingestion of SYNTHROID **Tablets** is precluded for long periods of time.

How supplied

SYNTHROID (sodium levothyroxine) **Tablets** are supplied as scored, color-coded compressed tablets in 6 concentrations: 25 mcg (0.025 mg)—orange . . . 50 mcg (0.05 mg)—white . . . 100 mcg (0.1 mg)—yellow . . . 150 mcg (0.15 mg)—violet . . . 200 mcg (0.2 mg)—pink . . . 300 mcg (0.3 mg)—green. Depending on strength, these tablets are available in bottles of 100, 500, 1000 and 5000.

SYNTHROID (sodium levothyroxine) for **Injection** is supplied in 10 ml vials containing 500 mcg of lyophilized active ingredient and 10 mg of Mannitol, U.S.P. A separate 5 ml vial containing Sodium Chloride Injection, U.S.P. is provided as a diluent.

Directions for reconstitution

Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml of the Sodium Chloride Injection, U.S.P. to the vial. Shake vial to insure complete mixing. **Use immediately** after reconstitution. Discard any unused portion.

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BY LARRY DIXON

Continuing Medical Education

ANALYSIS OF CATEGORY CREDIT

A specific task assigned to the Department of Education by MASA's College of Counsellors and House of Delegates was to attend as many physician organization meetings as possible and explain the particulars of the continuing medical educational requirement for membership.

In attempting to meet this directive, I have spoken at a number of county medical society and other physician organization meetings. The number one concern of the physicians in attendance has been how to accumulate the required number of hours for Association Membership, that requirement being 150 hours of continuing medical education over a three-year period.

This concern is justified and regardless of any explanations concerning the Council on Education's attempts to provide convenient cme before the requirement becomes effective, I have not been successful in overriding this fear. The basic argument is not that continuing medical education is unnecessary, but that the acquiring of these hours is going to be difficult for the physician practicing in rural areas without adequate coverage. This situation is what the new regionalized concept of the Council on Medical Education is attempting to accommodate. That, however, is not what this article is about.

I hope to greatly relieve many physicians who are justifiably concerned about acquiring 150 hours of cme credit. Some relief should be forthcoming once an explanation of how 90 of those hours can be easily obtained and in all likelihood are probably being accumulated at the present time without the physicians even being aware of how many hours he does receive while pursuing his daily activities. This can be done by disregarding Category 1, that category which has a 60 hour minimum requirement and which a physician can only satisfy by attending cme conferences produced by accredited organizations and turning our attention to the other five categories.

First of all, let me explain that the number one concept the physician must keep in mind is the identification of what type of education he is receiving. Whenever a physician realizes that he is involved in an educational activity, he must identify which category and log his participation on an hour for hour basis. When the yearly report form is mailed to the physician by the AMA or MASA, the physician then need only transfer his educational log to the report form and 90 of the required hours will have been accounted for.

Category II involves continuing medical education received from a non-accredited sponsor. Basically, Category II is received at staff meetings at unaccredited hospitals, CPC's, county society meetings where a scientific speaker is present and any other such educational activity wherein a speaker is responsible for presenting scientific matter to a group of physicians. There is a maximum of 45 hours per three-year period in this category.

Category III is the Category that deals with medical teaching. This Category can be acquired on an hour for hour basis for the preparation and delivery of educational matter to students, allied health personnel or other physicians. If you are involved in preparing yourself to present instructional material to the aforementioned individuals, then you may claim Category III credit for the time involved. This category also has a 45 hour maximum.

Category IV is concerned with papers, publications, books, presentations and exhibits. If you are involved in writing a scientific paper for presentation to a medical organization, you have availed yourself of 10 hours of Category IV cme. If you publish an article in a recognized medical journal, you have acquired 10 hours of Category IV. If you prepare a presentation or exhibit to be shown to a professional audience which can be made up of allied health professionals, you have again acquired 10 hours of cme.

Category V is where physicians should easily be able to accumulate the maximum of 45 hours. That category deals with non-supervised cme activities: Self-Learning. Examples of self-instruction include non-supervised use of audio visual materials, audio tapes, video tapes, films, film strips, alides, individual participation in programmed medical education materials, use of teaching devices and finally and most important, the individual reading of medical publications such as our state medical Journal. If you are involved in a consultation with a colleague, it is recognized that the physician is receiving educational benefit providing there is an organized review of current medical knowledge relating to a particular case. A physician can receive two hours for each consultation lasting less than one hour. The consultant may also elect to receive this credit in Category III: Medical Teaching.

Credit can also be claimed in a patient care review program. It is recognized that there is educational value in participation in utilization or peer review activities, medical audit, chart audit, or in participation in a Professfional Standards Review Organization. If you engage in a self-assessment program or in specialty board preparations, credit may be claimed.

Category VI, the final category, deals with other meritorious learning experiences. It, too, has a 45 hour credit limit and differs from the other categories in that this category is the catch-all for educational activities that are not specifically outlined in Categories 1 through V. If the physician believes he has benefitted educationally, he can include this information on his report form and request sufficient educational credit.

The AMA annually mails to every physician in the

Continued on Page 60

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HEW Proposal Fixes Half Of Financing With Third Parties

A program called the "Forward Plan" outlining a National Health Insurance (NHI) program that would fix half of its financing with third parties including the private sector, is currently being reviewed by new HEW Secretary David Mathews.

The plan, proposed for a five-year duration (1977-1981), bases its NHI theories on the basic principles of CHIP (introduced by the Nixon Administration), since HEW's health planners expect the Ford Administration to support a NHI plan next year.

A CHIP-like program would allow for an increase in the proportion of ambulatory care services, paid for through third-party reimbursement. The CHIP-like program would be able to finance about 50 per cent of the program expenditures.

Any NHI plan passed by Congress could potentially reduce continued Federal financing and it is expected that the current administration will support a plan which would give the private health insurance sector a far greater financial stake.

The plan basically presents HEW's rationale for its fiscal 1976 budget request. It emphasizes the Federal government's intention to pursue greater cost containment measures in the year to come. A HEW spokesman reports that the plan was prepared as a suggested "guideline" for the nation's future health care, presenting options which could be implemented.

CONTINUING MEDICAL EDUCATION

Continued from Page 59

United States a booklet entitled THE PHYSICIAN' RECOGNITION AWARD which gives a complete breakdown of all of the educational activities for which a physician may receive credit. This mailing is due some time during the late summer and it would be advisable for MASA physicians to keep this little booklet in their desks for use as a reference whenever they are concerned with educational activities.

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THE MONTH IN *Washington*



Congress deserted Washington for a summer holiday leaving behind not only the August heat of the Potomac swamplands, but also most of its planned health legislation still hanging up in the humid air.

With passage of national health insurance (NHI) written off for this year, both the Senate and House on return will tackle a variety of health or health-related matters including health manpower, already passed by the House, amendments to the Health Maintenance Organizations Act (HMO), and possible changes to the Medicare law.

While the health subcommittee of the House Ways and Means Committee has scheduled public hearings on NHI for October 28, subcommittee chairman Daniel D. Rostenkowski (D-Ill.) stated "the considerable lead time needed to forge a NHI bill" as the unexpected reason for hearings this year.

Pressing problems with Medicare, however, have prompted Rep. Rostenkowski to schedule hearings on possible changes to that law on September 19.

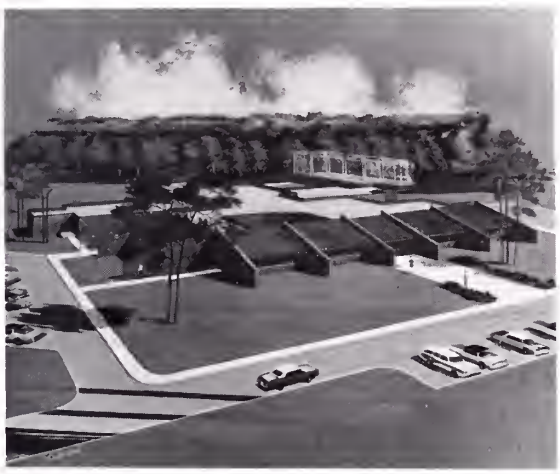
The slating of an additional hearing indicates the subcommittee will probably draft legislation to change some of the present Medicare regulations. There may not be time for final Congressional action this year, but legislation could clear Congress next year.

Listed as one topic of the hearing was the present law's requirement that physicians' Medicare reimbursement be tied to a type of cost-of-living index and geared to the 75th percentile of normal and customary charges. The AMA has challenged the fairness of HEW's proposed index and warned that the regulation could drive increasing numbers of physicians away from assignment.

Two other controversial Medicare regulations are up for review—possible revisions in Professional Standards Review Organizations (PSRO) provisions, and utilization review requirements for hospitals, the latter under temporary injunction by the Federal courts as a result of an AMA court protest.

Another blow has been delivered to NHI plans relying on Social Security financing. The General Accounting Office, supervisor of Federal spending and operations for Congress, reports Social Security's trust funds "face exhaustion in the near future because of increased benefit levels due to inflation, and high unemployment causing reduced contributions..."

According to GAO, projections covering the next 75 years show that the system will also incur a large long-range deficit because of the decreasing birth rate and the rising cost of living.



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DALLAS COUNTY

CONRADSON, Eric Paul, b 48, mc Northwestern 74, recip. NBME 75, 932-A Rowry Drive, Selma 36701. GP.

FRANKLIN COUNTY

WISE, David Miller, b 47, mc LSU 72, recip. La. 72, P. O. Box 429, Red Bay, 35582. FP.

MORGAN COUNTY

HONEYCUTT, Boyd Knetsar, b 42, mc Tenn. 69, recip Texas 69, P. O. Box 1928, Decatur, 35601. I.

SPARKS, Robert Ab, III, b 41, mc Kentucky 68, recip. Kentucky 69, 1103 16th Ave., S.E., Decatur 35601. Or.

TALLAPOOSA COUNTY

HAMILTON, James Victor, b 44, mc Ala. 71, recip. NBME 72, Medical Arts Bldg., Suite 5, Alexander City 35010. Ob-Gyn.

NEW TELEPHONE NUMBERS

ANDERSON, Henry L., Madison 539-9311
BARRON, Merrill R., Pike 566-0188
BASORE, John W., III, Madison 533-1144
BECK, Henry D., Jr., Madison 539-2728
BELL, William H., III, Madison 533-1600
BLACK, John K., Jr., Madison 536-0018
BOON, Robert H., Madison 539-9311
BOYER, Lynn B., Madison 533-1600
BRAMM, Horace G., Jr., Madison 533-4370
BRYAN, Albert C., Jr., Madison 539-9663
BRYSON, Roscoe E., Madison 533-4300
BUCK, Gray C., Jr., Jefferson 433-7946
CAMP, Ephriam E., Madison 881-0454
CAMPBELL, James E., Madison 533-4300
CONRADSON, Eric P., Dallas 875-9926
COSBY, Joseph C., Madison 536-5971
COTTER, Clement P., Madison 533-3130
DILWORTH, Thomas Elmor, Madison 536-8546
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GOLDSTEIN, Richard P., Madison 533-4894
GRIMES, Bennie M., Jefferson 347-3404
HALE, Robert B., Jr., Madison 539-1731
HAMILTON, James V., Tallapoosa 234-3477
HAWS, Frank P., Madison 533-1600
HEWITT, Lawrence B., Madison 536-5251
HOLLIMAN, James D., Jr., Madison 533-1160
HONEYCUTT, Boyd K., Morgan 355-5315
HOWIE, Virgil M., Madison 533-5490
KINZER, Gilbert M., Madison 533-3130
KNOX, George E., Madison 539-5117
LAMPERT, Ralph J., Madison 534-4082
LARRY, John H., Madison 534-4082
LITKENHOUS, Edward E., Jr., Madison 534-4082
MACCUBBIN, Don A., Madison 533-1600
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WILLICE, Robert L., Madison 536-8571
WISE, David M. Franklin 356-9338
WOOD, Robert V., Madison 536-2462
YOUNG, Lowry R., Jr., Madison 533-4300

MEMBERS DECEASED

COVINGTON COUNTY

WATERS, Hinton Wright, Sr., Opp . . . Deceased 7/30/75

ETOWAH COUNTY

SHADDIX, Marion L., Gadsden . . . . Deceased 7/26/75

JEFFERSON COUNTY

GREEN, Albert Huey, Birmingham . . . . Deceased 8/75

TALLAPOOSA COUNTY

WALLS, Jesse James, Alexander City . . Deceased 8/4/75

CORRECTION OF LISTING

JEFFERSON COUNTY

KAHN, Sigmond Aaron, 800 Montclair Road, Suite 226, Birmingham, 35213.

KAHN, Stanley Samuel, 924 South 18th Street, Birmingham 35205.

MOBILE COUNTY

WARREN, Claude M. III, - Specialty: Ophthalmology – Ophalmic Plastic Surgery

MORGAN COUNTY

PETRY, Gary Glenn to Petry, Cary Glenn.

CHANGE OF ADDRESS

BALDWIN COUNTY

MCLEOD, John C., Jr., present Daphne to 7-M Northwood Lake, Northport, 35476

HOUSTON COUNTY

PAULK, Charles T., present Dothan to 2019 Alexander Drive, Dothan, 36301.

JEFFERSON COUNTY

AGER, L. Lamar, present Birmingham to 2660 10th Avenue, South, Suite 305, Birmingham, 35205.

BUCK, Gray C., Jr., present Birmingham to St. Vincent's Prof. Bldg., 2660 10th Avenue, South, Birmingham 35205.

CARRAWAY, Charles A., present Birmingham to 24 Woodhill Road, Birmingham, 35213.

COSBY, Joseph C., present Birmingham to 7911 West Haven Drive, No. 4, Huntsville, 35802.

CROMMELIN, Henry, Jr., present Birmingham to 2660 10th Avenue, S., Suite 401, Birmingham 35205.

EDGE, William T., present Bessemer to P. O. Box 747, Bessemer, 35020.

FREEMAN, William J., present Sumter, S. C., to Box 567, Florence, 35630.

GANDY, Roy E., present Birmingham to 1044 Forest Brook Drive, Birmingham, 35226.

GRIMES, Bennie M., present Birmingham to Enterprise Medical Clinic, P. A., 207 E. Brunson, Enterprise, 36330.

GUITIERREZ-MAZORRA, Juan F., present Groton, Conn, to 1245 Dogwood Avenue, Morgantown, West Va., 26505.

HARRIS, Richard R., present Birmingham to St. Vincent's Prof. Bldg., 2660 10th Avenue, S., Birmingham 35205.

JOHNSON, James C., present Birmingham to 1932 Laurel Rd., Suite C., Birmingham, 35216.

LYTLE, Richard A., present Birmingham to 8012 Ebb Tide Circle, Huntington Beach, California, 92646.

McCULLOUGH, George C., present Fairfield to 2701 20th Street, West, Birmingham, 35208.

MILLS, Patrick L., present Birmingham to 2000-II Medical Center Drive, Birmingham, 35209.

SIMPSON, David C., present Birmingham to 1932 Laurel Rd., Suite C., Birmingham, 35216.

WEST, Otus T., present Birmingham to St. Vincent's Prof. Bldg. 2660 10th Avenue, S., Birmingham 35205.

LAWRENCE COUNTY

KILPATRICK, Troy F., present Courtland to P. O. Box 669, Oneonta, 35121.

LOWNDES COUNTY

SEGALL, Nathan, present Montgomery to 4009 Old Shell Road, Apt. A-10, Mobile, 36608.

MOBILE COUNTY

GROSS, Charles M., present Mobile to 2218 Fulbrook Center, Mobile, 36605.

MONTGOMERY COUNTY

MCRAE, James D., present Montgomery to 3980 Governors Dr., Montgomery, 36111.

TUSCALOOSA COUNTY

RYALS, Jarvis D., present Tuscaloosa to 90 High Forest. Tuscaloosa, 35401.

STRAHAN, Eva E., present Tuscaloosa to Maison Deville Apts. No. 327, Gulfport, Mississippi, 39501.

Federal Tax Dates

OCTOBER

1. Employee status determination date for withholding exemption certificate (IRS Form W-4, Revised).

9. Semi-monthly excise taxes deposit due (IRS Form 504). (See January 9).

24. Semi-monthly excise taxes deposit due (IRS Form 504). (See January 9).

31. Quarterly return (IRS Form 941) due on Withheld Income and Social Security Taxes. (Return and taxes are due on this day if employer elects to include direct remittance for last month in quarter with return). (See November 10).

31. Monthly Excise taxes deposit due (IRS Form 504) or file quarterly Excise tax return (IRS Form 720) including direct remittance for last month in quarter with return. (See November 10).

31. Federal Unemployment Compensation Tax, third quarter 1975 tax deposit due (IRS Form 508), if total tax due through third quarter exceeds $100.

CARE OF THE PATIENT WITH THERMAL INJURIES

sponsored by the
American Burn Association
in cooperation with
The University of Alabama in Birmingham,
Division of Continuing Medical Education
School of Nursing, Continuing Education Service
and
The Veterans Administration,
Southeastern Regional Medical
Education Center

Birmingham Hyatt House
901 North 21st Street - Birmingham, Alabama 35203

November 14-15, 1975

Registration Fee:	*Before 10/30/75*	*After 10/30/75*
Physicians	$100	$125
Nurses	55	65
Therapists, Residents and others	50	60

Credits
American Medical Association, Category 1—13 hours
American Academy of Family Physicians—13 prescribed hours
Registered Nurses—1.3 Continuing Education Units
Registered Physical Therapists—1.3 Continuing Education Units

For further information contact: Alan R. Dimick, M.D., Department of Surgery, UAB, University Station, Birmingham, Alabama 35294.

Digest of Actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the August 20 meeting of the State Board of Censors:

- Approved Financial Statement for period ending July 31, 1975, showing receipts of $35,707.84 and disbursements of $59,828.69.
- Recommended full support of the amended Alabama Medical Liability Act.
- Commended Dr. Dewey White, Mr. Mooresmith, Mr. Whitaker and Mr. Patterson for the work they had done on the proposed malpractice legislation.
- Adopted Resolution of Appreciation to Drs. Hamrick, Galbraith and Stabler in commendation for their time and efforts which they had placed into legislative work.
- Approved the Constitutions of Lauderdale, Winston and Pickens County Medical Societies.
- Recommended the MASA/Wausau program remain available to faculty members, licensed physicians and residents who are members of MASA. Recommended that residents and interns who are not members of MASA could be insured by Wausau's National Association of Residents and Interns (NARI).
- Recommended that MASA, Wausau and UAB continue to work together for the mutual benefit of all.
- Recommended that the Subcommittee on Association Affairs act as a state-wide Grievance Committee.
- Received as information interim report of Council on Medical Service.
- Received as information report on Education Department.
- Received as information report on Communications Department.
- Received as information report of Legislative Affairs Department.



Following the ceremony, Dr. Jones (r) visits with (l to r) HEW Secretary and former UA President, Dr. David Mathews; Dr. Wm. R. Willard, Dean, College of Community Health Sciences; and former First Lady, Mrs. Lyndon B. Johnson.

Dr. John Paul Jones Receives Honor At FP Center Dedication

Dr. John Paul Jones, family physician from Camden and former Board of Censors Chairman, was honored at the August 10 dedication of the new Family Practice Center at the University of Alabama campus in Tuscaloosa. Official dedication ceremonies marked the major effort underway at the University's College of Community Health Sciences to solve the critical problem of health care in rural and small town Alabama.

Dr. Mathews, HEW Secretary and former University President, presented Dr. Jones with a citation for his "outstanding contributions to the practice of community medicine and years of dedicated medical service to his fellow man."

Dr. Jones, who maintains a limited medical practice in Camden, was a graduate of the University of Alabama in 1913 and received his medical degree from Tulane University. Dr. William R. Willard, dean of the College, presented certificates of appreciation to those Alabama physicians who are serving as volunteer faculty members at the Center.

Herewith is presented a Digest of Actions taken at the September 17 meeting of the State Board of Censors:

- Approved Financial Statement for period ending August 31, 1975, showing receipts of $9,367.49 and disbursements of $38,838.80.
- Approved request for the third and final allotment from ALAPAC in the amount of $2,500.
- Approved payment by MASA of 50 per cent of the total Governor's Medical Liability Task Force expenses ($1,936.43).
- Recommended that Mr. L. P. Patterson, Executive Director, MASA, attend the AAMSE Regional Meeting, New Orleans, September 24-26.
- Received as information Interim Report of Council on Medical Services.
- Received as information report of the Education Department.
- Received as information report of Communications Department.
- Received as information report of Legislative Affairs Department.
- Approved amended Alabama Medical Liability Act as passed by the Senate.
- Received as information report of Legal Department.
- Approved Constitution of Cherokee County Medical Society.
- Received as information report of Insurance Department.
- Received as information letter from the Second District Dental Society stating that it backed MASA on the Alabama Medical Liability Act.
- Recommended that E. Vernon Stabler, Sr., M.D., President, MASA, be empowered to appoint a representative to the Alabama Advisory and Coordinating Council on Hypertension.



Physician Placement Service In Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

Allergy and Clinical Immunology: Age 30; Medical College of Georgia 1971; National Board; Board certified; seeking solo or associate practice, preferably in Birmingham or coast. Available July 1976. LW-O.

General Practice: (Family Practice) Age 38; University of Nebraska 1966; seeking associate or group practice. Available January 1976. LW-1/1

General Practice: Age 46; Syracuse New York 1955; National Board; seeking group or institutional practice in town less than 20,000. Available September or October 1975. LW-1/2

Internal Medicine-Pediatrics: Age 28; University of Alabama 1973; National Board; interested in town greater than 10,000 population. Available July 1976. LW-4/2

Internal Medicine: Age 27, Louisiana State University 1974; seeking assistant or associate practice. Available July 1977. LW-4/1

Ophthalmology: Age 28, University of Alabama in Birmingham 1974; Available 1978. LW-10

Ophthalmology: Age 28, Tulane University 1971; Board eligible; seeking solo, associate or group practice. Available July 7, 1976. LW-10/2

Ophthalmology: Age 28; Emory University 1973; seeking solo, associate or group practice. Available July 1977. LW-10/3.

Orthopedics: Age 32; University of Tennessee 1969; Board eligible; seeking solo, associate, group, industrial or institutional practice; Available January 1976. LW-11

Orthopedics: Age 29; State University of New York at Buffalo 1972; Board eligible; seeking associate practice. Available July 1976. LW-11/1

Pediatrics: Age 27; University of Alabama 1973; seeking group practice. Available July 1976. LW-7/1

Pediatrics: Age 31; University of Alabama 1970; National Board; Board eligible; seeking associate or group practice. Available August 1976. LW-7

Surgery: Age 32; University of Illinois 1969; Board certified; National Board; seeking solo, associate or group practice. Available August 1976. LW-8.

Surgery: Age 30; University of Florida 1972; Board eligible; seeking solo or associate practice; Available July 1977. LW-8/3

Surgery-Thoracic & Cardiovascular: Age 35; Ohio State University 1966; Board certified; seeking associate or group practice. Available January 1976. LW-8/2

Urology: Age 32, University of Arkansas 1969; Board certified; Available July 1977. LW-9

Urology: Age 32; Northwestern University 1968; National Board; Board eligible; Available January 1976. LW-9/1

Urology: Age 30; Northwestern 1968; National Board; Board eligible. Available January 1976. LW-9/1

PHYSICIANS WANTED

(Opportunities For Practice)

Family Practice Physicians wanted in East Central Alabama City serving trade area of 40,000 population. Well equipped JCAH fully accredited 191-bed hospital and 52-bed skilled nursing home and fully accredited school of nursing. Location of area Mental Health-Mental Retardation Center. Fulltime radiology and pathology. Excellent opportunities in solo practice, partnership, or multispecialty clinic. Office space available for reasonable rental. Invitations to visit with expenses paid will be directed to those who qualify. PW-10

General Practitioner, Obstetrician-Gynecologist, Family Practitioner needed in progressive coastal community with trade area of 30,000 population. Two man practice located adjacent to an excellent 100-bed hospital. Medical school within 55 miles. Unlimited hunting, fishing, golf, tennis and water sports. PW-1

General Practitioner; associate wanted in a three physician general practice in a rural county near Mobile. Salary initially with anticipated early partnership arrangement. 30-bed county hospital adjoining the office. PW-1/5

General Practitioner: Opportunity in town of 3,000 population located in west Alabama in trade area of 20,000 population. 30-bed hospital in the town. Nearest large city 50 miles distant, population of 150,000. The Medical Clinic Board is authorized by the town to provide office space and arrange adequate housing. Farming and industry in the community. Churches, schools, and recreational activities. PW-1/8

Wanted—**2 General Practitioners, 1 Pediatrician** to locate in Central Alabama town with 17,000 population and a trade area of 35,000 population. Located near large city with specialty consultants available. Good 68 bed hospital with plans for a new 85 bed replacement hospital in the near future. Excellent fishing and camping, hunting, golf and schools. Excellent location to raise a family and practice medicine. Healthy stable economy. Minimum on call, none on weekends. Office suites available rent free for the first 12 months, also other financial assistance available; including moving expenses. Invitations to visit with expenses paid. PW—1/4

Opportunity for **General Practitioner** in northeast Alabama community of 1,200 population, trade area of 6,000-17,000 population; nearest large cities 13-20 miles. Physician in the town died recently. Office space and housing readily available. Government work and industry. School and several churches. Recreational and social activities.

NECROLOGY



DR. GREEN



DR. PAYNE



DR. WALLS



DR. WATERS

A. H. Green, M.D.
1900 - 1975

Dr. A. H. Green, prominent Birmingham surgeon for more than 47 years, died August 4, after an extended bout with cancer.

A native of Marion County, Dr. Green graduated from the University of Tennessee School of Medicine. He was a retired colonel in the U.S. Air Force and served as flight surgeon and commanding officer at several Air Force bases during World War II.

His professional memberships included MASA, the Southern Medical Association and a Fellow of the Southern Surgical Congress. He is survived by his wife, Mrs. Mildred Volentine Green; two sons and two daughters.

Thomas J. Payne, Jr., M.D.
1909 - 1975

Dr. Thomas J. Payne, Jr., Jasper, Alabama, died on July 7, 1975, in Brussels, Belguim. Dr. Payne had arrived in Brussels on July 6 with the MASA travelers on the Rhine Discovery trip.

A native of Coalburg, Jefferson County, Dr. Payne graduated from Tulane University School of Medicine in 1935, and interned at Baptist Hospital, New Orleans. He began general practice in Jasper in 1936. Dr. Payne served as president of the Walker County Medical Society, Vice President of MASA's Northwestern Division and was elected a Counsellor of MASA in 1971. He was also a member of the Alabama Chapter, American Academy of Family Physicians.

Survivors include his wife, Mrs. Mary Lou Payne, of New Orleans, two sons, Thomas Jefferson Payne, III, M.D., Fairfield, and Louis Thomason Payne, M.D., Tuscaloosa, and two daughters.

Marion L. Shaddix, M.D.
1885 - 1975
(Photo Not Available)

Dr. Marion L. Shaddix, Gadsden physician, passed away July 26, following an extended illness. Dr. Shaddix was 89 years of age.

A graduate of Old Ashland College as a teacher, Dr. Shaddix entered medical school and graduated in 1910 from the Medical University of Alabama in Mobile. He then served as a physician and part-time health officer in Clay County.

His career included public health work in Russell and Randolph counties, association with VA hospitals in Tennessee from 1952 to 1968 and civilian medical doctor at Redstone Arsenal Hospital. Dr. Shaddix is survived by his wife and a daughter, both of Gadsden.

Jesse James Walls, M.D.
1890 - 1975

Dr. Jesse James Walls, age 85, died of a heart attack August 4, 1975. He was born in Clay County and had a continuous practice in Alexander City for 60 years.

A former life counsellor of MASA, Dr. Walls received his M.D. degree from the University of Alabama and came to Alexander City in 1920. At the time of his death, he was a widower and is survived by three daughters, four grandchildren and three great grandchildren.

Hinton W. Waters, Sr., M.D.
1890 - 1975

Dr. Hinton W. Waters, Sr., Opp, Alabama, passed away July 30, 1975. He was a general practitioner in Opp for many years and had served as director of the Mizell Memorial Hospital until his retirement.

Born in Brundidge in 1890, Dr. Waters graduated from the Medical College of Alabama in 1913. He was a member of the Covington County Medical Society and MASA. Dr. Waters, at the time of his death, was a 60-year Mason.

He is survived by his wife, Mary Hamby Waters; a daughter, Mrs. James L. Tindel, Dothan; four sons, two of which are physicians, Hinton W. Waters, Jr., M.D., Montgomery and William L. Waters, M.D., Pensacola; nine grandchildren and two great grandchildren.

Auxiliary



Martha Hughes
President

Auxiliary Looks Ahead

One of the main objectives of this column is to increase its appeal among the growing readership of the *Journal.* We realize that many of our doctors and their wives do glance this way and we welcome this opportunity to keep you abreast of what the Auxiliary is doing.

This is an open invitation for all the wives of physicians in the State to visit the district meetings which will be held in various parts of the State during the months ahead. We want each of you to become involved with us, as we strive to make Alabama, our towns and our communities better places in which to live.

Communication is the key for any project to be successful. In most cases, the larger counties and particularly those well organized are fairly easy to contact. However, we are asking each doctor who reads this column to check with his wife, and if she does not belong to an auxiliary, is not a Member-At-Large, and desires to know more about our many plans and projects, to be alert when the invitation comes her way, and encourage her to attend the meetings.

The four district vice-presidents are earnestly preparing for these meetings. Mrs. Aubrey Terry (Hettie), of Franklin County, is the northwest leader, and the date for that get-together has been set for September 24 at Joe Wheeler State Resort, which is near Rogersville. Mrs. Eugene Bradley (Annie), of Centre, of the northeast district has reserved October 7 at the Downtowner Motel in Anniston. The Olympia Spa in Dothan, October 21, will be the setting of the southeast district with Mrs. Emil Wright, Jr., of Auburn. Mrs. Charles Weaver (Faye), of Mobile, will greet us when we arrive at the Grand Hotel for the southwest meeting on November 10.

"Join us, we can do more together" is the theme of the national membership drive. There are over 2,600 eligible spouses in our State. We have 1,600 of them on our rolls. We need each and every one to help in our programs.

Volunteers are needed in many areas of our programs. Again, the month of October has been set as Immunization Action Month by the Center for Disease Control. Both the AMA and the Auxiliary have been asked to participate in activities during this month which attempt to reverse the trend of declining immunization levels among young children. Although progress has been made, the immunity levels among the 1- to 4-year-old children are still low enough to sustain substantial spread of disease. Please volunteer some of your time in clinics, in your husband's office or wherever to help in the battle.

Flu Vaccinations Urged Now For Winter Season

It is not too soon to begin vaccinations for next winter's flu season, says a report by the Federal Advisory Committee on Immunization. Influenza vaccine should be administered by mid-November.

Only about one of every ten Americans in the high risk group is being vaccinated each year against influenze. The high risk group includes the chronically ill – heart disease, bronchopulmonary problems, kidney problems, diabetes and other such disorders, and people 65 years old and older.

In the past the vaccine was given in two doses, but the recommendation for this year is that a single dose is adequate. People in the high risk group should be vaccinated annually.

Perhaps one in five adults will react to the vaccine with low fever, chills, aching muscles and headache. Children are more likely to have fever, and sometimes a medication to control fever is given to children following the vaccine. The vaccine is prepared from virus grown in fertile eggs, and thus should not be taken by those allergic to eggs.

Convention To Stress Continuing Education

Continuing education for physicians will be the theme of the 28th Clinical Convention of the American Medical Association November 30 – December 5 in Honolulu.

Forty-one post-graduate courses will be offered to physicians attending the convention. Subjects will cover the entire range of medical practice – dermatology, blood lipids, infectious diseases in children, new antibiotics, family planning, sexual difficulties, management of critically ill patients, special medical problems of women, child abuse, allergies, emergency room X-rays and resuscitation in heart attacks.

Special lectures will be presented on the latest information on the state of the art in treatment of high blood lipids, stress ulcers, breast cancer, poisons, antibiotic therapy, coronary artery surgery, stomach cancer, computerized scanning, management of the obesity and pulmonary clots.

General sessions will be presented on human sexuality, office management of alcoholism, and on weight control, diet and physical fitness.

Registration for the convention will open on Sunday, November 29. Courses and lectures will be held December 1 – December 5. The AMA's policy-making body, the House of Delegates, will hold its semi-annual meeting November 30 – December 3.

OPPORTUNITY FOR GENERAL PRACTICE

Opportunity for General Practice with Surgery available because of death of physician with 47 years of service. Telephone (205) 871-4172, or write Box A, 19 South Jackson Street, Montgomery, Alabama 36104.

New Physicians Licensed To Practice In Alabama



Bruton, Charles Wilson, Jr., M.D., Bowman Gray School of Medicine, 1974, Reciprocity with North Carolina (FLEX).



Adams, George Marshall, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Axley, John Harold, Jr., M.D., University of Maryland School of Medicine, 1965, Reciprocity with Maryland. Specialty: Pediatrics.



Cale, Robert Torrance, Jr., M.D., University of Alabama School of Medicine, 1974, Reciprocity with Georgia (FLEX).



Adams, Patricia Lee, M.D., Bowman Gray School of Medicine, 1974, Reciprocity with Carolina (FLEX).



Barton, James Clyde, Jr., M.D., University of Tenn. Center for Health, 1971, Reciprocity with Tennessee. Specialty: Internal Medicine and Hematology.



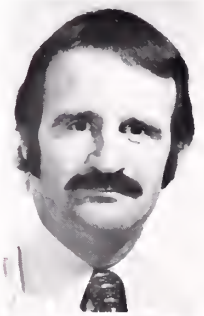
Canale, Daniel Doyle, M.D., Vanderbilt Medical School, 1971, Reciprocity with National Board of Medical Examiners.



Allison, Thomas McWane, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Berryman, Richard Lee, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Carroll, Richard Charles, M.D., University of Missouri School of Medicine, 1967, Reciprocity with Missouri. Specialty: Otolaryngology.



Arkans, Howard David, M.D., Stanford University School of Medicine, 1970, Reciprocity with National Board of Medical Examiners. Specialty: Pediatrics.



Brown, Bernice Zimmers, M.D., University of S. California School of Medicine, 1965, Reciprocity with National Board of Medical Examiners. Specialty: Ophthalmology.



Chester, Thomas Jay, M.D., Stanford Medical School, 1973, Reciprocity with Louisiana (FLEX).



Childs, William Hayden,M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Currier, Carol Anne, M.D., Medical College of Pennsylvania, 1972, Reciprocity with National Board of Medical Examiners.



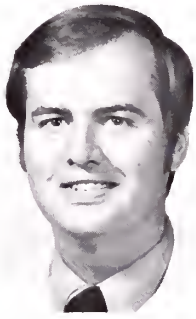
Echols, Robert Linsey, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Clark, Douglas Earl, Jr.,M.D., University of Mississippi School of Medicine, 1971, Reciprocity with Mississippi. Specialty: Radiology.



Davis, James Edward,M.D., University of Miami School of Medicine, 1962, Reciprocity with Florida. Specialty: General Surgery.



Elliott, Clyde Dale, M.D., Medical College of Virginia, 1974, Reciprocity with National Board of Medical Examiners.



Cowley, Michael Joseph, M.D., University of Alabama School of Medicine, 1972, Reciprocity with National Board of Medical Examiners.



Davis, James Williams, M.D., University of Tenn. Center for Health, 1974, Reciprocity with Tennessee (FLEX).



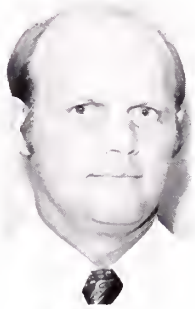
Ennis, Cecil Lawrence,M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Crist, William Miles, M.D., University of Missouri School of Medicine, 1969, Reciprocity with Missouri.



Dempsey, Peter Joseph, M.D., St. Louis University School of Medicine, 1966, Reciprocity with Missouri. Specialty: Diagnostic Radiology.



Faucette, John Roberts, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



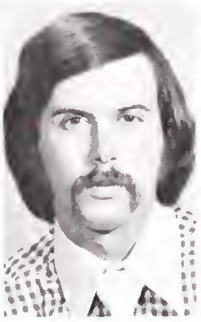
Cumbie, William Gary, Jr., M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Duggar, Roger Sherman, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



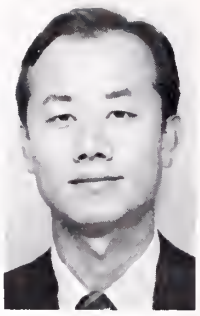
Fore, David Lawson, M.D., University of Illinois College of Medicine, 1967, Reciprocity with National Board of Medical Examiners. Specialty: Radiology.



Fox, Lawrence Steven, M.D., University of Florida College of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Hickman, Thomas Jefferson, III, M.D., LSU School of Medicine, 1971, Reciprocity with Louisiana (FLEX). Specialty: Ob-Gyn.



Kim, Yoon (Robert) M. D., Yonsei University College of Medicine (Korea), 1966, Reciprocity with Georgia (FLEX). Specialty: Radiology.



Geer, Jack Charles, M.D., LSU School of Medicine, 1956, Reciprocity with Louisiana. Specialty: Pathology.



Hood, Hugh Marvin, M.D., Medical College of Georgia, 1974, Reciprocity with National Board of Medical Examiners.



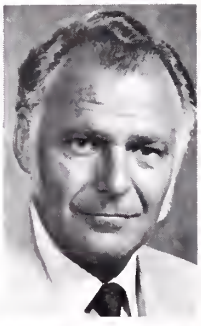
Kirkpatrick, Michael Bruce, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Graham, James Lawrence, M.D., LSU School of Medicine, 1961, Reciprocity with Louisiana. Specialty: Ob-Gyn.



Hunker, Fred Dominic, M.D., University of Nebraska College of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Knight, Edward Washburn, M.D., SUNY Upstate Medical Center College of Medicine, 1956, Reciprocity with National Board of Medical Examiners. Specialty: Internal Medicine.



Griffith, Thomas Harris, M.D., LUS School of Medicine, 1966, Reciprocity with Louisiana. Specialty: Urology.



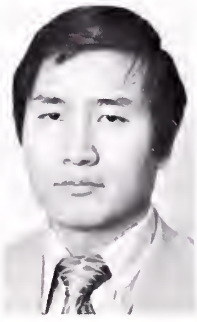
Hybart, John Lee, M.D., LSU School of Medicine, Reciprocity with Louisiana (FLEX).



McAtee, John Norville, M.D., University of Alabama School of Medicine, 1970, Reciprocity with National Board of Medical Examiners.



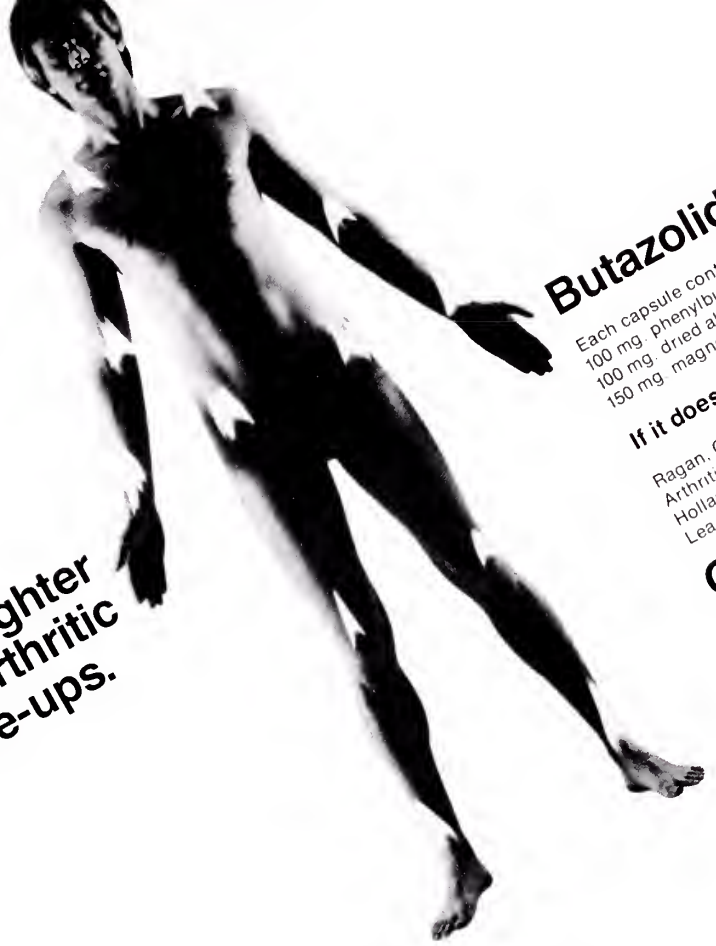
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Kim, Sin,M.D., Yonsei University College of Medicine (Korea), 1967, Reciprocity with Georgia (FLEX). Specialty: Radiology.



McCauley, David Richard, M.D., University of Tennessee College of Medicine, 1973, Reciprocity with Tennessee (FLEX).



Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

Ragan, C. The Clinical Picture of Rheumatoid Arthritis, in Arthritis, ed. 8, edited by J. L. Hollander and D. J. McCarty, Jr., Philadelphia, Lea & Febiger, 1972, chap. 21, p. 335.

Geigy

Fire fighter for arthritic flare-ups.

Important Note This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Substitute alka capsules for tablets if dyspeptic symptoms occur. Patients should discontinue the drug and report immediately any sign of fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.

Indications Rheumatoid arthritis, osteoarthritis, bursitis, acute gouty arthritis and rheumatoid spondylitis.

Contraindications Children 14 years or less, senile patients, history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia, history or presence of drug allergy, blood dyscrasias, renal, hepatic or cardiac dysfunction, hypertension; thyroid disease; systemic edema; stomatitis and salivary gland enlargement due to the drug, polymyalgia rheumatica and temporal arteritis, patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions The following should be accomplished at regular intervals. Careful detailed history for disease being treated and detection of earliest signs of adverse reactions, complete physical examination including check of patient's weight, complete weekly (especially for the aging) or an every two week blood check, pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

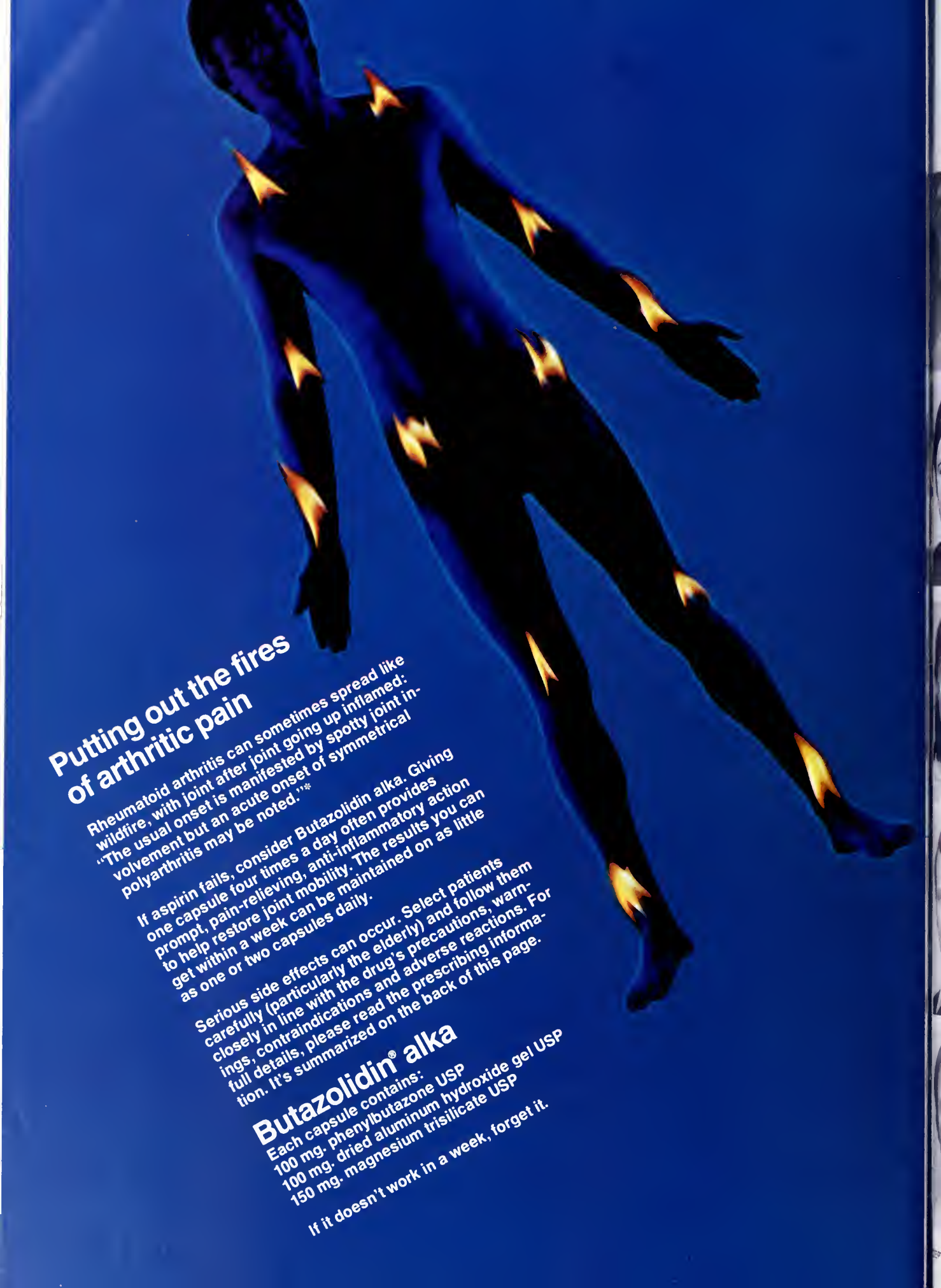
Adverse Reactions This is a potent drug, its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy, CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia, ulcerative stomatitis, salivary gland enlargement.

(B)98-146-070-J (10/71)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

BU 10259



Putting out the fires of arthritic pain

Rheumatoid arthritis can sometimes spread like wildfire, with joint after joint going up inflamed: "The usual onset is manifested by spotty joint involvement but an acute onset of symmetrical polyarthritis may be noted."*

If aspirin fails, consider Butazolidin alka. Giving one capsule four times a day often provides prompt, pain-relieving, anti-inflammatory action to help restore joint mobility. The results you can get within a week can be maintained on as little as one or two capsules daily.

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions. For full details, please read the prescribing information. It's summarized on the back of this page.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.



Martin, Douglas Flynn,M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



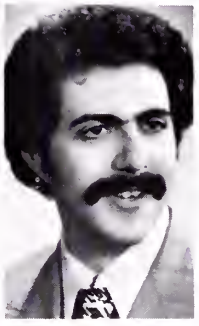
Sawyer, Nancy Jane,M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Wallach, Ronald, M.D., Columbia University College of Physicians and Surgeons, 1970, Reciprocity with National Board of Medical Examiners.



Murray, Harry Murphy, Jr.,M.D., University of Alabama School of Medicine, 1970, Reciprocity with National Board of Medical Examiners. Specialty: General Surgery.



Segall, Peter Howard,M.D., McGill University, 1973, Reciprocity with National Board of Medical Examiners.



Wang, Jen-Fang, M.D., National Taiwan University College of Medicine, 1955, Reciprocity with Georgia (FLEX). Specialty: Anesthesiology.



Ratanaubol, Ubol Kulprapha, M.D., Fac. of Med. Chulalongkorn Hospital (Thailand), 1961, Reciprocity with Virginia (FLEX). Specialty: Pediatrics.



Soto, Benigno,M.D., Universidad de San Marcos (Peru), 1956, Reciprocity with Mississippi (FLEX). Specialty: Radiology.



Roberts, William Eggers,M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Tietke, Wilhelm, M.D., University of Gottingen (West Germany), 1968, Reciprocity with Michigan (FLEX). Specialty: Internal Medicine and Gastroenterology.



Rutledge, John Hoyle, III,M.D., University of Kentucky College of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Tucker, Bruce Alan, M.D., University of Miami School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.

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ALABAMA DEPARTMENT OF PUBLIC HEALTH

Bureau of Preventable Diseases

ST. LOUIS ENCEPHALITIS

St. Louis Encephalitis is caused by a mosquito-borne group B arborvirus. Man is felt to be an incidental host and the demonstrated reservoir has been found to be birds. However, the presence of reservoirs of St. Louis encephalitis virus infection capable of transmission to man in other warm-blooded animals has not yet been ruled out. The vector is the culex mosquito, which is an evening-biting mosquito with wide distribution throughout the State.

Infection with St. Louis encephalitis virus can cause a wide spectrum of clinical symptoms. The disease can vary from extremely mild to fatal. The disease is more severe in the elderly, with the majority of cases occurring in those over the age of 50. The mortality rate in those over the age of 50 who develop symptoms of encephalitis is believed to be approximately 20 to 25 per cent.

Common presenting signs and symptoms include fever, headache and abnormalities of the central nervous system such as disorientation, tremors, ataxia, paralysis, or coma. Nausea, vomiting and nuchal rigidity are also commonly seen. The presenting picture may sometimes be that of an aseptic meningitis, particularly in the younger patients.

In addition, approximately 25 per cent of cases present with urinary tract symptoms either prior to or concomitant with the encephalitis picture. Because of the central nervous systems, St. Louis encephalitis is often confused with other neurological entities such as cerebrovascular accidents or delirium tremens. Examination of the spinal fluid is often extremely helpful in making the diagnosis. Spinal fluid examination usually reveals a moderate pleocytosis, 10 to 500 cells, predominantly lymphocytes. The C.S.F. sugar is usually normal and the protein may be normal or mildly elevated.

Definitive diagnosis is made by demonstrating a four-fold or greater rise in antibody titers. However, high titers in the acute serum often occur and can be grounds for a strong presumptive diagnosis. Blood for acute titers should be drawn as soon as the patient is seen. It should be immediately forwarded to the State Laboratory so that virus titers can be performed. Follow-up convalescent titers should be performed at ten days to two weeks and again at six weeks to two months. The importance of these convalescent titers cannot be overemphasized, since it is only by knowing where cases occur that effective mosquito control programs can be planned.

As of August 28, 1975, 118 cases of suspected encephalitis or aseptic meningitis have been reported to the State Department of Public Health. Of these, virus titers have proven to be negative in the vast majority. There are three cases with acute titers of 1:160, which is considered strong presumptive evidence of St. Louis encephalitis. There is one additional case with a borderline presumptive titer of 1:40. Convalescent titers on these patients are still pending. Two of these patients are from Blount County, one from Morgan County and one from Jefferson County.

Treatment of St. Louis encephalitis consists of supportive care and may require extensive respiratory therapy support. Although there is no known cure, those who recover spontaneously usually have no apparent neurological sequelae.

Control of the disease is best accomplished by control of the mosquito vector. While adulticiding, whether by aerial spray or ground spray, has some effect, the most effective means of control of culex mosquitos is through larviciding. Prevention of mosquito breeding is accomplished by elimination of stagnant water pools. Common breeding sites are often found in old tires, tin cans, at the base of downspouts, in bird baths and in fish ponds.

Elimination of such objects, where feasible, will greatly reduce the mosquito population. Bird baths should be emptied and cleaned twice per week and breeding in fish ponds may be greatly reduced by stocking the ponds with mosquito-eating fish such as the gambusia minnow. Watering pans for pets should be emptied daily. Where stagnant water pools cannot be eliminated, a thin covering of No. 2 fuel oil with a surfactant may greatly reduce the development of the larvae. Removal of thick brush around drainage ditches and other water pools may help in eliminating resting sites for adults and, therefore, may have some effect in reducing mosquito population.

GONORRHEA—JULY 1975

Total Female Specimens	23,447
Positive Cultures	1,229
Positive	5.2%
Submitted from Private Practice	13,092
Positive Cultures	394
Positive	2.8%

Darkfield Microscopy is available to physicians at no cost by calling 832-3205 collect at any time. A technician and equipment will be dispatched to your office.

EADING CAUSES OF DEATH IN ALABAMA

The ten leading causes of death were ranked in the same rder during the first quarter of 1975 as for the correspondng quarter of a year ago.

By accounting for slightly more than one-third of all eaths, diseases of the heart remained the leading cause of eath of Alabama residents. These diseases were the cause f more than twice as many deaths as any other malady.

Following heart diseases were malignant neoplasms and erebrovascular diseases as the second and third leading auses respectively. These two causes combined to account or 2,254 deaths or about 28 per cent of all deaths.

Despite a reduction of 22 motor-vehicle accidental eaths, the total number of accidents increased by one rom the number recorded during 1974's first quarter. ompared to the previous quarter, the number of accidental deaths fell from 634 to 478—a decrease of about 25 er cent. More than two-thirds of this reduction was due to 09 fewer traffic deaths occurring.

Mortality due to influenza and penumonia was almost 50 er cent higher than that experienced during 1974's first uarter. This increase is probably a result of the influenza pidemic experienced during the latter part of 1974.

1975			CAUSE OF DEATH	1974		
RANK	NUMBER	RATE		RANK	NUMBER	RATE
1	2,668	301.7	Diseases of Heart	1	2,604	295.9
2	1,255	141.9	Malignant Neoplasms	2	1,241	141.0
3	999	113.0	Cerebrovascular Diseases	3	1,067	121.3
4	478	54.1	Accidents	4	477	54.2
5	277	31.3	Influenza and Pneumonia	5	186	21.1
6	207	23.4	Diseases of Arteries	6	184	20.9
7	179	20.2	Diabetes Mellitus	7	136	15.5
8	140	15.8	Homicide	8	127	14.4
9	111	12.6	Bronchitis, Emphysema and Asthma	9	121	13.8
10	99	11.2	Selected Causes in Early Infancy	10	109	12.4
-	1,524	--	All Other Causes	-	1,487	--

Leading causes of death to Alabama residents first quarter 1975 and 1974

Alabama's Public Health Laboratory ranks second in the United States in volume of work.

Alabama is presently a leader in controlling solid waste disposal. In 1969, when the law was passed, 26% of incorporated areas had adequate solid waste disposal systems and 5% of the total unincorporated areas. After five years of work, 90% of the incorporated areas and 88% of the rural areas have adequate controls.

LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH
ABORATORY COMBINED REPORT FOR PERIOD JULY 1975

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO. EXAMS
RASITOLOGY	Helminths & Protozoa	4,735	589	3,939	207	4,692
	Toxoplasma	66	10	54	2	66
NTERIC BACTERIOLOGY	Salmonella & Shigella	407	84	321	2	1,469
	E. coli	138	52	86		234
	Cultures-Isolation					
ENERAL BACTERIOLOGY	Cultures-Confirmation	75	72	6	3	1,797
OOD BACTERIOLOGY	Cultures	136	-	12		684
TAPHYLOGOCCUS	Cultures-Isolation	81	46	35		81
	Cultures-Confirmation					
TREPTOCOCCUS	Cultures	3,434	381	3,042	11	4,028
	Cultures-Isolation					
IPNTHERIA	Cultures-Confirmation					
	Microscopic Smears	3,857	175	3,509	173	3,684
UBERCULOSIS	Cultures-[illegible] Confirmation	60				560
	Cultures-General					14,736
YCOLOGY	Cultures	245				1,960
	Venereal Smears	1,920	458	1,445	19	1,918
	Blood-VDRL Test	34,233	754	32,681	253	35,818
	W.R. Total 545					
ENEREAL DISEASES	Blood-Premarital	4,370	29	4,271	23	4,582
	W.R. Total 48					
	Spinal Fl.-VDRL Test	101	2	96	3	103	
	Spinal Fl.-T.Protein	89	33	28	28	89
	FTA (Borderline-51)	376	200	106	6	376
	GC Cultures	26,032	2,119	23,660	253	26,380
ACTERIAL AGGLUTINATION	Brucellosis					
	Tularemia					
PECIAL SEROLOGY	HI Rubella	1,965				1,965
	CF Test(Fungal,Viral,Rickettsial)	413				2,087
	PKU Screening	7,522				7,522
ENETIC DISEASES	PKU Chemistry	57				84
	Hemoglobinopathies	5,920				6,624
	Other					
YTOLOGY	Smears	4,152				6,459
	Lactose-MPN	82	5		1	190
ATER	Membrane Filter	5,115	1,257	3,553	305	6,037
	Chemistry	34	50	3,368	29	3,451
ILK PRODUCTS	Milks	2,111				8,575
	Other	1,589				4,160
EA FOODS	Oyster-Plate Count	21				21
	Oyster-Fecal Coli.					63
ABIES	Smears-Negri Bodies	43		40	3	90
	FA Examination	157	3	147	6	155
IRUS ISOLATIONS	Cultures	37	8	20	9	148
h FACTOR	Bloods	907	796	109	2	1,123
ISCELLANEOUS		1,067				1,888
OLOT PAP PROGRAM		266				304
ACTERIAL AGGLUTINATION		6				
	Brucellosis		1	4		5
	Tularemia			4		4
TOTALS		111,819	7,129	80,536	1,338	154,214

August 22, 1975

ALABAMA DEPARTMENT OF PUBLIC HEALTH
SPECIAL SERVICES ADMINISTRATION
DIVISION OF VITAL STATISTICS
FOREST E. LUDDEN, ED.D., DIRECTOR
PROVISIONAL STATISTICS
JUNE 1975

VITAL EVENT	NUMBER RECORDED			RATES*		
	TOTAL	WHITE	NON-WHITE	1975	1974	1973
Live Births	4,480	3,005	1,475	15.4	14.9	15.3
Deaths	2,551	1,811	740	8.8	8.5	9.5
Fetal Deaths	70	36	34	15.6	17.8	21.1
Infant Deaths - Under 28 Days	45	21	24	10.0	13.7	16.3
Under 1 Year	66	32	34	14.7	16.5	22.5
Maternal Deaths	2	1	1	4.5	7.0	2.3
CAUSES OF DEATH						
Bacillary dysentery, amebiasis, 004, 006	-	-	-	-	-	-
Enteritis, other diarrheal diseases, 008, 009	4	1	3	1.4	1.4	2.8
Tuberculosis, all forms, 010-019	7	2	5	2.4	2.1	3.1
Diphtheria, 032	-	-	-	-	-	-
Whooping Cough, 033	-	-	-	-	-	-
Meningococcal Infections, 036	-	-	-	-	-	-
Poliomyelitis (acute), 040-043	-	-	-	-	-	-
Measles, 055	-	-	-	-	-	-
Syphilis, 090-097	-	-	-	-	-	-
Malignant Neoplasms, 140-209	467	350	117	160.6	150.4	155.7
Diabetes Mellitus, 250	56	32	24	19.3	21.8	22.9
Major cardiovascular diseases, 390-448	1,243	927	316	427.5	416.5	461.4
Diseases of heart, 390-398,402,404, 410-429	825	643	182	283.8	280.7	297.4
Rheumatic fever & heart, 390-398	9	6	3	3.1	4.1	3.8
Hypertensive heart & renal disease, 402,404	9	6	3	3.1	4.1	4.5
Ischemic heart disease, 410-414	584	536	148	235.3	238.5	256.8
Cerebrovascular Disease, 430-438	350	242	108	120.4	106.5	135.2
Diseases of Arteries, 440-448	58	38	20	19.9	27.0	26.4
Influenza, 470-474	-	-	-	-	-	-
Pneumonia, 480-486	52	41	11	17.9	12.4	13.2
Bronchitis, emphysema & asthma,490-493	26	22	4	8.9	9.7	16.7
Appendicitis, 540-543	-	-	-	-	0.7	0.3
Hernia, intestinal obstr., 550-553,560	9	8	1	3.1	2.4	2.8
Cirrhosis of liver, 571	25	19	6	8.6	10.7	11.8
Complications of preg., childbirth, 630-678	2	1	1	0.7	1.0	0.3
Congenital anomalies, 740-759	27	20	7	9.3	6.6	9.4
Immaturity, 777	5	2	3	1.7	2.4	5.9
Accidents, total, 800-949	195	142	53	67.1	61.2	71.6
Motor Vehicle accidents, 810-823,940	81	59	22	27.9	27.3	37.2
All other causes (defined)	277	166	111	95.3	105.8	109.1
Symptoms & Ill-defined, 780-796	156	78	78	53.7	48.4	60.1

*Rates: Births and Deaths - per 1,000 population.
Infant Deaths - per 1,000 live births.
Fetal Deaths - per 1,000 live births.
Maternal Deaths - per 10,000 live births.
Deaths from specified causes - per 100,000 population.

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Elouise and the ten other professional relations people throughout Alabama are trained to help you with difficult claims. And they can answer your questions about any area of the field.

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"We've got phone equipment to fit your business. And we'll maintain it now, next week, next year, any time you need us."



Bill Penick
General Marketing
Manager

There are other companies selling phones these days. You may have been approached by one of them.

But there are some important things you need to find out before you make a commitment to anybody.

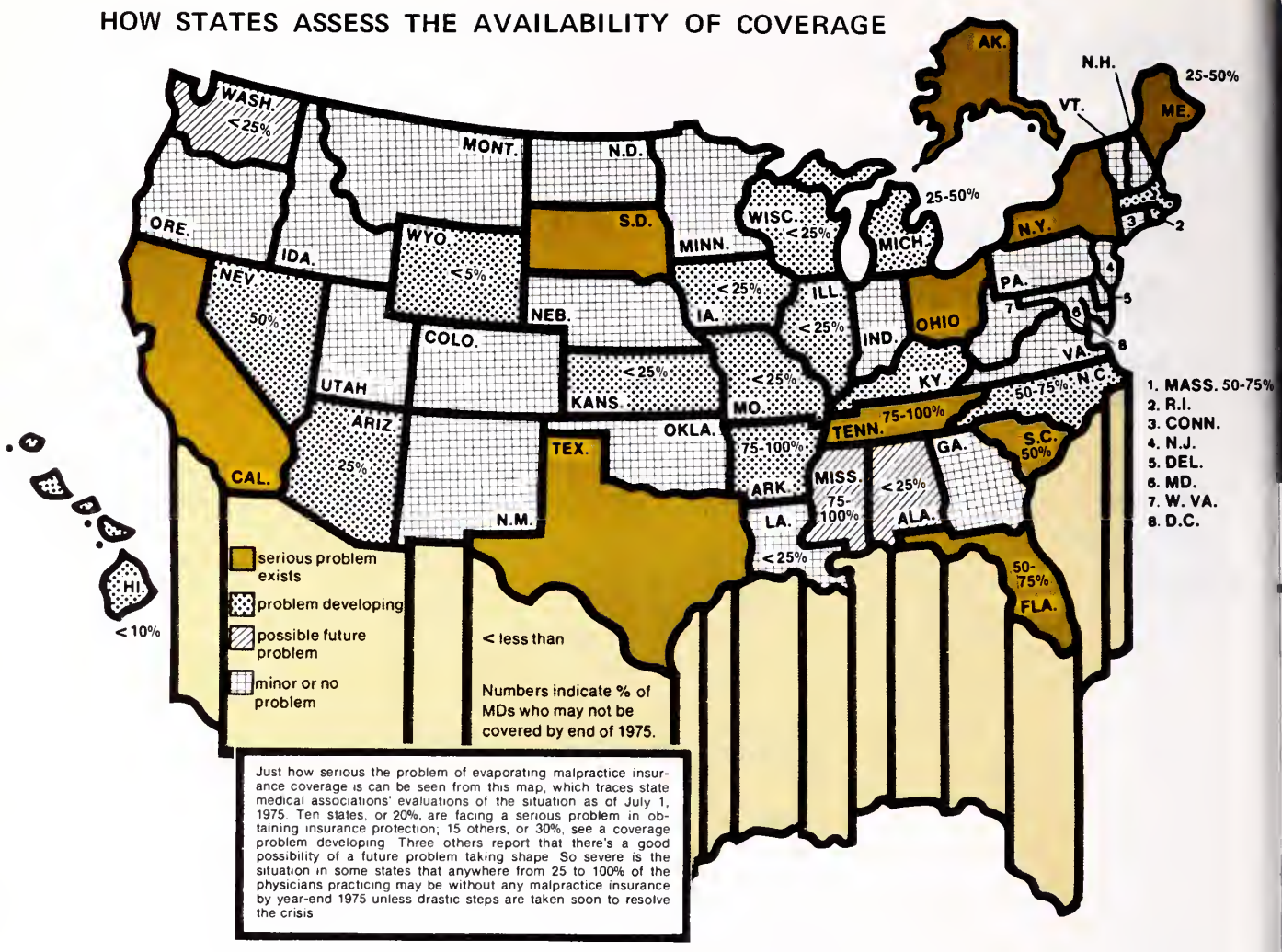
Maintenance capability and costs are basic considerations for starters, but in addition you really need the total-service picture.

You should find out what it would cost to keep the system up-to-date. What recourse do you have if the equipment doesn't perform? Do your payments to a leasing company or financial institution continue even if the vendor fails to live up to his maintenance contract?



Who would pay for insurance on the equipment, and what would the insurance cover? What taxes would apply—and who pays them? Then consider this: South Central Bell is in the business of total communications service. We're not just selling equipment. We offer total, end-to-end service. And we'll take care of your equipment—now and for years to come, at no extra charge. Before you make a decision on telephone equipment, call a South Central Bell Communications Consultant. There's no charge for the use of this service, and there's no obligation. Get the whole story on South Central Bell capability—total service capability.

South Central Bell



U.S. MALPRACTICE PROBLEM

The availability of professional liability insurance for physicians in 1976 is in jeopardy in 28 states, according to a *PRISM* magazine survey of state medical associations. *(PRISM is the socioeconomic magazine of the AMA.)*

The survey is part of a special AMA source document, titled "Malpractice in Focus," which reveals the all-pervasive character of the uniquely American problem.

Insurance Services Organization, a trade association, predicts that rates will increase as much as 500 per cent in 1976 and will average 170 per cent high nationwide. In a search for solutions to this worsening problem, state legislators across the country have already introduced more than 400 bills designed to correct the problem.

There is no pattern to the crisis. Rural and industrial states alike have experienced malpractice problems. Nor does proximity or life-style predicate response. North Dakota has so far experienced only minor problems of insurance availability, but South Dakota already has a serious problem.

The AMA estimates that as many as 40,000 malpractice claims nationwide will probably be filed in 1975. This claim-level represents an average increase of 12 per cent annually since 1970.

As expected, surgeons are the most vulnerable to suits, with cardiac surgeons running the greatest risk: one-fourth had claims filed against them in 1974. The least vulnerable, predictably, include allergists, pathologists, and psychiatrists. Among general practitioners, only 5.88 per 100 doctors had claims filed against them.

The most active states in terms of claims filed in 1974, are California, New York, Florida, Wisconsin and Maryland.

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251 Cox Street, Mobile, AL 36604 Phone 205/432-6611

'You Doctors make too damn much money'

Even a sphygmomanometer can't measure the way M.D. blood boils when doctors are charged with earning sums way out of proportion to what others make. And the indignation thus aroused may be more justifiable than many have thought. Sure, some doctors do report incomes well in excess of $100,000 per year, but plenty more make a whole lot less than that. According to the latest *Medical Economics* Continuing Survey, the median solo self-employed U.S. physician grosses $66,190 per year. But his median net income after payment of salaries, over-head, and other expenses comes to just $39,100. Which is *before* taxes that would likely put him in the 39 per cent bracket. Not such a princely sum at all, considering that the average physician works 60 hours per week to "rake in" his money. And that's to say nothing of the responsibility the doctor shoulders, the years he spent in training, and his relatively short career, which didn't really get going until he was in the 30s. Remember those points when a critic begins his attack. Better yet, quote him a few figures from the accompanying chart. For instance, among the occupations shown, only the crane operator makes less than a doctor on an hourly basis.

After a big slice, John Q. Doctor's income isn't so grand

$66,190 median M.D. gross income-minus overhead and expenses ..... **$39,100.** median net before taxes

Occupations	M.D.	Pre-clinical Professor	Chief Exec. Small Mfg. Corp.	Army Major General	Crane Operator	Lawyer
Here's how John Q. Doctor's annual income compares with . . .	$39,100	$32,500	$48,000	$36,930	$25,500	$30,000
Which looks impressive until you consider weekly working hours . .	60	55	58	55	37	40
and what that means in pay per hour . . .	$13.58	$15.15	$17.24	$13.98	$13.44	$15.30
Finally, don't forget the years of formal education involved.	23	20	16	17	12	19

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RADIOLOGISTS' SURVEY REVEALS "DEFENSIVE MEDICINE" PRACTICED

An efficacy study conducted by the American College of Radiology revealed that 11 per cent of 1,500 radiographs taken in an emergency setting were requested primarily for medical-legal purposes. The study included a section for clinicians to indicate the major reason for ordering a radiograph.

The percentages for spine and skull radiographs were predictably high, motivated by a concern over the possibility of a clinically occult fracture. On the other hand, intravenous pyelogram procedures were not ordered at all, a sign that practitioners are concerned over the risks of performing them.

The ACR study is a concerted attempt to define and measure the concept of "defensive medicine," which is often alluded to in deliberations over malpractice insurance.

MICHIGAN LAW REDEFINES DEATH

Michigan Governor William Milliken has signed a bill that allows physicians to turn off life-support equipment after a patient's brain has ceased to function. The law redefines death as the moment at which spontaneous breathing and blood circulation cease irreversibly in a doctor's announced opinion, based on ordinary community standards of medicine.



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REPORT PUTS BITE ON MOSQUITO

Scientists are beginning to learn what attracts the mosquito to its prey. According to a recent report, summarized in the July 13 issue of the "New York Times," a mosquito's flight is random until it is stimulated by a rise in carbon dioxide, such as that exhaled by a human.

When its antennae detect a warm moist airstream, such as that around a person, perspiring or not, the mosquito follows the current to its source, lands and bites. This knowledge may lead to the development of better repellents.

JOURNAL of the Medical Association of the State of ALABAMA

ALABAMA PHYSICIAN

THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA • 1873 •

OCTOBER 1975

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Sudden Infant Death— A Devastating Syndrome

Smoking And Serum Triglycerides

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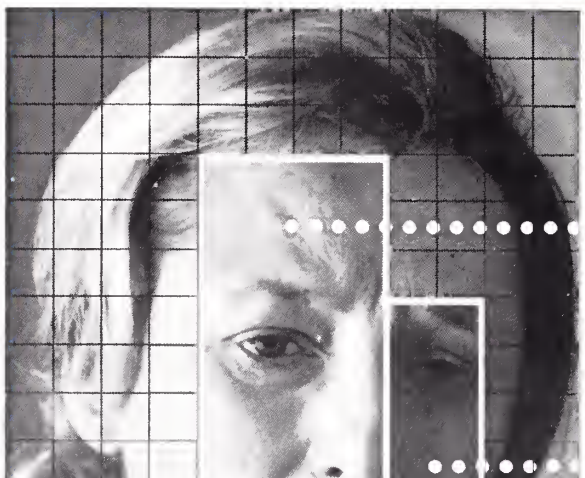
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Both often



Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

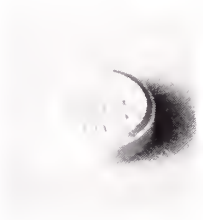
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam)

2-mg, 5-mg, 10-mg tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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The JOURNAL

of the

Medical Association of the State of Alabama

VOLUME 45, NUMBER 4 OCTOBER 1975

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price $12.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS**: Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING**: Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS**: As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS**: Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



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At the daily staff meeting they are affectionately known as the "Happy Hot Dogs." This designation is not intended in ridicule but rather as a high compliment to the character, competence and charisma of what many describe as the best Medical Association staff ever assembled.

For indeed they are a happy lot, both the men and women who have been given responsibility for the several departments of MASA. They understand the importance of team work and work together without friction. They can tease and be teased without wounded egos.

They are "hot to trot" to accomplish both immediate and long-range objectives, each fully dedicated to the success of his own departmental responsibilities.

And they have a bulldog tenacity, putting in long hours and hard labor to win our battles.

Some of them enjoy the advantages of education or special training essential to their assignments; others are blazing trails, digging out their expertise by hard work, trial and error.

There are Emmett Wyatt and Lavelle Forsythe, who head up the membership and bookkeeping departments, respectively, seniors in point of service; and Cathy Hayden, next in senority, who is developing the department of specialty services.

Jack Mooresmith, General Counsel, is rapidly becoming the foremost expert on medico-legal problems, particularly as they relate to Alabama physicians. And Dickey Whitaker, Director Legislative Affairs, who works hand-in-glove with him in the analysis and resolution of legislative problems, whether in Montgomery or Washington.

There is Larry Dixon, Director of Education, who is developing an accredited continuing education program for Alabama physicians. And Dow Walker, Director of Insurance Department, as busily engaged in the socio-economics areas of Medicine.

Finally, there are Jim Stallings, Director of Communications, and Wayne Mainor, Manager of the Printing Department, who have ultimate responsibility to transmit to the membership, through these pages of the *Journal* and otherwise, everything of importance that other department heads are doing. Their efforts also are utilized to maintain a continuous flow of information about organized medicine to the general public, whose approbation we all depend upon for approval and survival.

IMPORTANT INFORMATION: *This is a Schedule V substance by Federal law; diphenoxylate HCl is chemically related to meperidine. In case of overdosage or individual hypersensitivity, reactions similar to those after meperidine or morphine overdosage may occur; treatment is similar to that for meperidine or morphine intoxication (prolonged and careful monitoring). Respiratory depression may recur in spite of an initial response to Nalline® (nalorphine HCl) or Narcan® (naloxone HCl) or may be evidenced as late as 30 hours after ingestion. LOMOTIL IS NOT AN INNOCUOUS DRUG AND DOSAGE RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO, ESPECIALLY IN CHILDREN. THIS MEDICATION SHOULD BE KEPT OUT OF REACH OF CHILDREN.*

Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with special caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis. In severe dehydration or electrolyte imbalance, withhold Lomotil until corrective therapy has been initiated.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage. Use with care in patients with acute ulcerative colitis and discontinue use if abdominal distention or other symptoms develop.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing, hyperthermia, tachycardia and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria, paralytic ileus, and toxic megacolon.

Dosage and administration: ***Lomotil is contraindicated in children less than 2 years old.*** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, hyperthermia, tachycardia, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. A narcotic antagonist may be used in severe respiratory depression. Observation should extend over at least 48 hours.

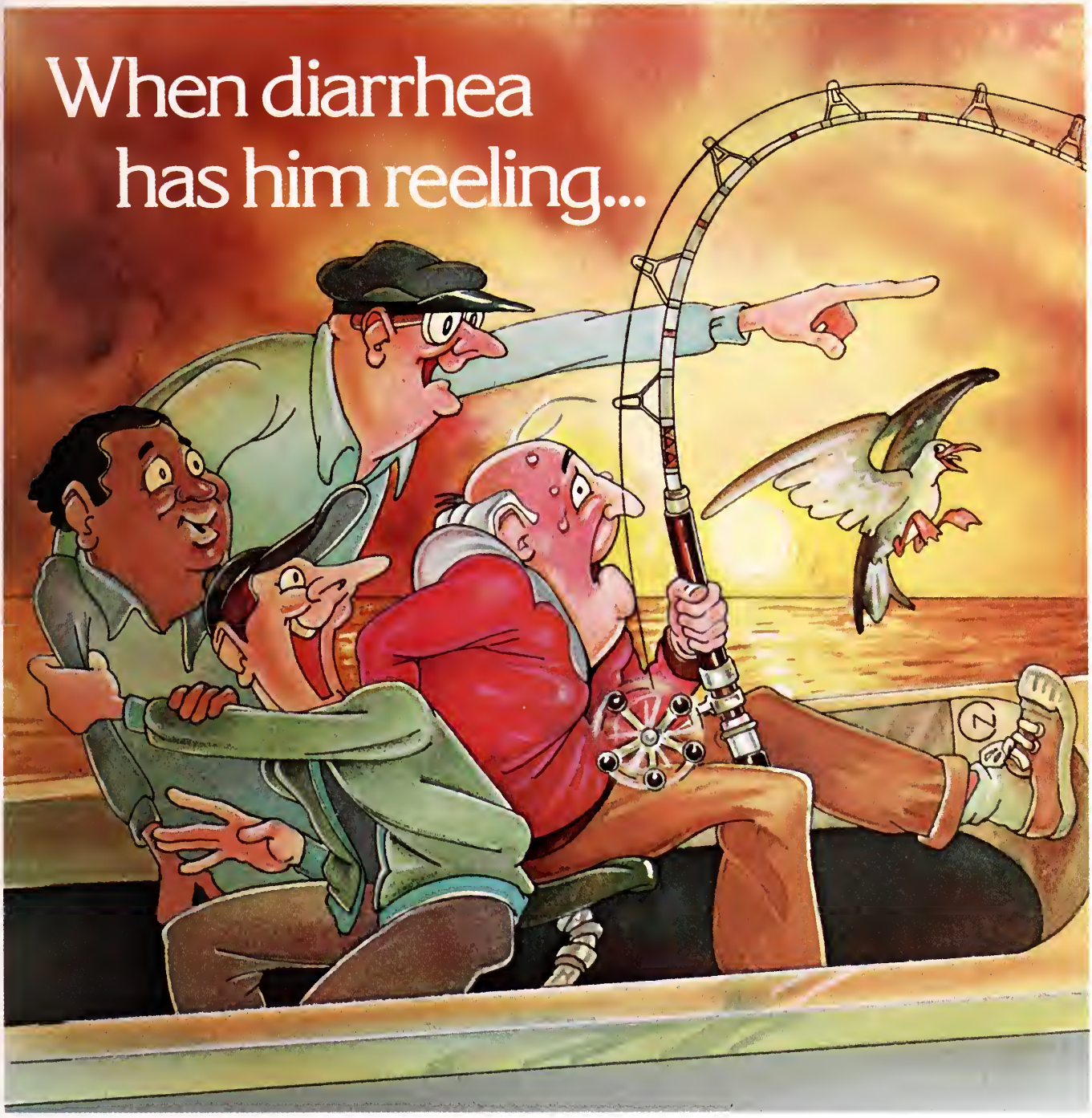
Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. Liquid, 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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455

When diarrhea has him reeling...



Diarrhea can hook anyone. When it does, physicians and patients both want prompt control of diarrheal symptoms. Lomotil will usually control diarrhea promptly.

This rapid action can halt the emergency aspect of diarrhea and is comforting and reassuring to the patient. Electrolyte and fluid losses can be corrected while the specific cause of the diarrhea is being determined. If an infective agent is the cause, appropriate specific therapy should be given along with Lomotil.

Lomotil is contraindicated in children less than 2 years old.

Lomotil®

TABLETS LIQUID

Each tablet and each 5 ml of liquid contain diphenoxylate hydrochloride 2.5 mg. (Warning: May be habit forming.) atropine sulfate 0.025 mg.

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In hypertension,
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usually offers more than effective lowering of blood pressure...

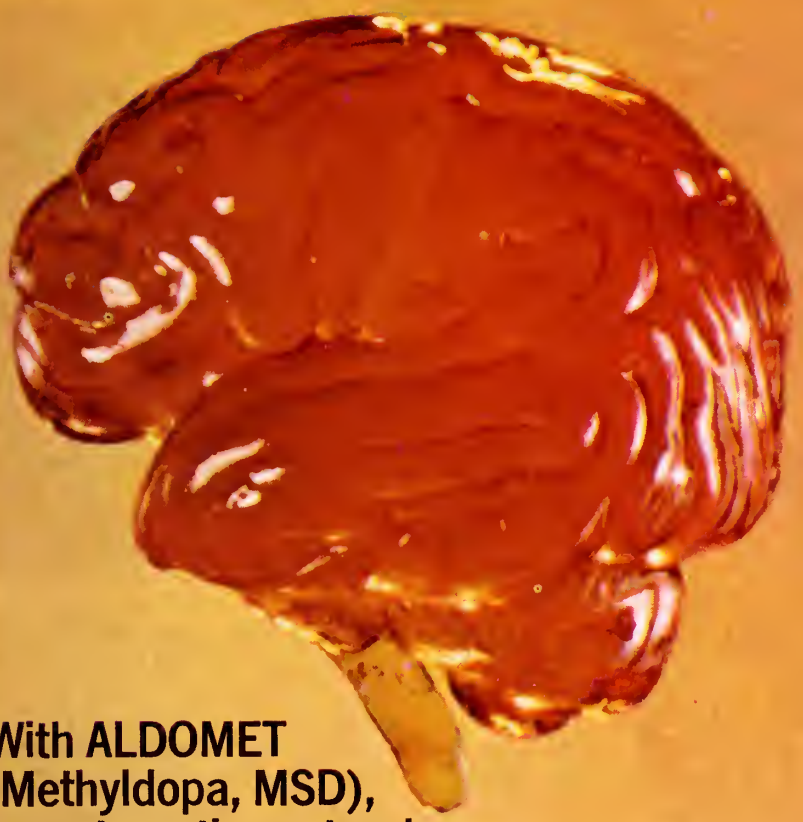


With ALDOMET (Methyldopa, MSD), existing renal function is usually unchanged

ALDOMET has no direct effect on renal function. When used in effective doses, ALDOMET usually does not reduce glomerular filtration rate, renal blood flow, or filtration fraction.

With ALDOMET (Methyldopa, MSD), cardiac output is generally unchanged

ALDOMET has no direct effect on cardiac function. When ALDOMET is used in effective doses cardiac output is usually maintained with no cardiac acceleration; in some patients the heart rate is slowed.



With ALDOMET (Methyldopa, MSD), symptomatic postural hypotension is infrequent

ALDOMET reduces both supine and standing blood pressure. Less frequent symptomatic postural hypotension is experienced with ALDOMET than with many other antihypertensive agents. Exercise hypotension and diurnal blood pressure variations rarely occur.

for hypertension

TABLETS, 250 mg, 500 mg, and 125 mg

ALDOMET®

(METHYLDOPA|MSD)

a unique antihypertensive agent

ALDOMET is contraindicated in active hepatic disease, hypersensitivity to the drug, and if previous methyldopa therapy has been associated with liver disorders. It is not recommended in pheochromocytoma.

It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. For more details see the brief summary of prescribing information.

MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please see following page.

MSD
MERCK SHARP & DOHME

addendum

to further simplify therapy for many patients

now available ALDOMET® 500 mg (METHYLDOPA|MSD)

- **often more practical to prescribe**
- **easier for patients to remember**

Now offered in addition to the standard 250-mg tablet, the new ALDOMET 500 mg tablet is a patient convenience. An especially important one, since in hypertension convenience of the dosage schedule is one factor that can make the difference in compliance of the patient. The minimum daily dose of ALDOMET is 250 mg b.i.d. The usual starting dose is 250 mg t.i.d. Dosage is adjusted as necessary by adding or deleting 250 mg or 500 mg at intervals of not less than two days. The maximum dose is 3.0 g per day.

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MSD 516
sig: one tablet b.i.d.

1.5-g daily dose =

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MSD 516
sig: one tablet t.i.d.

2.0-g daily dose =

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MSD 516 MSD 516
sig: two tablets b.i.d.

Rx ALDOMET 500 mg (Methyldopa/MSD)
MSD 516
sig: one tablet q.i.d.

NOTE: Tablets shown are not actual size.

in hypertension

ALDOMET® (METHYLDOPA|MSD)

usually lowers blood pressure effectively



Contraindications: Active hepatic disease, such as acute hepatitis and active cirrhosis; if previous methyldopa therapy has been associated with liver disorders (see Warnings); hypersensitivity.

Warnings: It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. Read this section carefully to understand these reactions.

With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between 6 and 12 months of therapy Lowest incidence is at daily dosage of 1 g or less This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at 6 and 12 months after the start of therapy If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive A positive direct Coombs test alone will not interfere with typing or cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first 3 weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first 2 to 3 months of therapy In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first 6 to 12 weeks of therapy or whenever an unexplained fever occurs. If fever and abnormalities in liver function tests or jaundice appear, stop therapy with methyldopa If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued Methyldopa should not be reinstituted in such patients.

Rarely, a reversible reduction of the white blood cell count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur. Patients should be followed carefully to detect side reaction or unusual manifestations of drug idiosyncrasy.

Use in Pregnancy: Use of any drug in women who are or may become pregnant requires that anticipated benefits be weighed against possible risks; possibility of fetal injury can not be excluded.

Precautions: Should be used with caution in patients with history of previous liver disease or dysfunction (see Warnings) May interfere with measurement of uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, falsely high levels of urinary catecholamines may be reported This will interfere with the diagnosis of pheochromocytoma. It is important to recognize this phenomenon before a patient with a possible pheochromocytoma is subjected to surgery Methyldopa is not recommended for patients with pheochromocytoma Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites

Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has recurred after dialysis in patients on methyldopa because the drug is removed by this procedure.

Adverse Reactions: *Central nervous system:* Sedation, headache, asthenia or weakness, usually early and transient; dizziness, lightheadedness, symptoms of cerebrovascular insufficiency, paresthesias, parkinsonism, Bell's palsy, involuntary choreoathetotic movements; psychic disturbances, including nightmares and reversible mild psychoses or depression.

Cardiovascular: Bradycardia, aggravation of angina pectoris. Orthostatic hypotension (decrease daily dosage). Edema (and weight gain) usually relieved by use of a diuretic. (Discontinue methyldopa if edema progresses or signs of heart failure appear.)

Gastrointestinal: Nausea, vomiting, distention, constipation, flatus, diarrhea, mild dryness of mouth, sore or "black" tongue, pancreatitis, sialadenitis.

Hepatic: Abnormal liver function tests, jaundice, liver disorders.

Hematologic: Positive Coombs test, hemolytic anemia Leukopenia, granulocytopenia, thrombocytopenia.

Allergic: Drug-related fever, skin rash.

Other: Nasal stuffiness, rise in BUN, breast enlargement, gynecomastia, lactation, impotence, decreased libido, mild arthralgia, myalgia.

Note: Initial adult dosage should be limited to 500 mg daily when given with antihypertensives other than thiazides. Tolerance may occur, usually between second and third month of therapy; increased dosage or adding a thiazide frequently restores effective control. Patients with impaired renal function may respond to smaller doses. Syncope in older patients may be related to increased sensitivity and advanced arteriosclerotic vascular disease; this may be avoided by lower doses.

How Supplied: Tablets, containing 125 mg methyldopa each, in bottles of 100; Tablets, containing 250 mg methyldopa each, in single-unit packages of 100 and bottles of 100 and 1000; Tablets, containing 500 mg methyldopa each, in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

MSD MERCK SHARP & DOHME



MESSAGE
FROM
THE
PRESIDENT

We are challenged! Do we know it?

E. Vernon Stabler, Sr., M.D.

The best medicine in the world is practiced in the United States. I am convinced that health care in its entirety is implemented as well in Alabama as in any state in the Union. I believe our Medical Centers are the peers of any, in that the medical arts are dispensed in our cities, our suburban and rural communities in a way comparable to any similar spot in the world. For advancement in every category, the earlier history of the healing arts cannot equal the last 25 years.

Perhaps because of this unusual achievement much more is expected to Americans in medicine than was ever dreamed of before this time. Surely many more fantastic advances can be expected of the world of healing arts.

Longevity of life expectancy advances each year. This is soon to be upwards of 80 years for the newborn. Centenarians are not uncommon and those with "three score years and ten" are today considered too young to be claimed by death. Many people 80 years and above are yet active in business, religious activities, civic and social life in our communities and the number constantly rises. Truly, this is one measure of achievement for the healing arts.

Yet, still, we are constantly challenged. I wonder if we really know it? Great achievements, of course, demand even greater achievements. In fact, great achievements soon make the unusual the expected. Our profession is rapidly becoming the most investigated, the most regulated, the most prodded and the most "sought from" of any segment of our people.

True as this may be, we, the Medical Profession, are not as a whole the most actively involved group. We have meetings, organizations, editorials, drives and committees, but many doctors do not even come out for any of the get-togethers. This is not to mention that they never get active in their support of anything. Challenges beat down our very doors, yet many of us never accept them or even admit they need our acceptance. We simply won't get involved. Some of us even sit back, complain and criticize—always just one doctor to another.

In too many communities it happens that an important issue may be facing the profession, but without personal phone calls and cajoling there will not be ten doctors at a meeting. Make no mistake, however. What the news media, T.V., headlines, and politicians say is of utmost importance. We resent being told how to treat a patient, but rebel at getting involved to stop such inroads.

Are we as doctors giving a minimum of our time to our professional affairs or can we claim to be working according to a maximum standard? If we really want to gain in control, we must give of our time and effort. Maximum concepts never come from minimum effort. Operating by a minimum standard can only produce a minimum result. What is "enough" for a day—for a person—for a job to be done?

Never let the minimum become the maximum. We must move out of the dim halls of mere obligation into the realm of real joy in satisfying achievement. Let us try living at the maximum.

We are being challenged. Do we know it?

Rick King, at Blue Cross, solves a problem in filing a claim before it becomes one.



Eleven professional relations people are assigned to specific sections throughout Alabama. And Rick King is one of them. Each assures you the easiest route to filing a claim without any problems.

They know the organization they work for. Before going out into the field, each worked in every department at Blue Cross. Learning the ropes thoroughly. So that when you need help in filing a claim, they can give it to you.

And each staffer has an area he can cover with ease. To be there when you need him.

So, if you need help in filing a claim, call Blue Cross and ask for the professional relations person in your area. They'll probably solve your problem before it even becomes one.

Blue Cross
Blue Shield
of Alabama

editorials
editorials

In The Event Of A Catastrophe

Each passing day, with its concomitant variations in the national economy, bolsters our conviction that Congress will not enact national health insurance legislation, perhaps even in this decade.

To be sure, 1976 is an election year and the candidates will be flitting about the country promising pie in the sky to everyone. But with bankruptcy threatening many cities and all 50 states finding it difficult to balance their budgets, the wildest imaginations cannot envision Congress embarking upon such a prohibitively expensive scheme.

This is not to infer that some type of catastrophic insurance protection will not be written into law. Many physicians believe that this type of coverage is needed immediately, particularly by those people in the middle income ranks who can find a lifetime of savings and struggling wiped out by a single accident or illness.

In fact an aggressive young Georgia physician, J. D. Bateman of Albany worked vigorously at the most recent AMA Annual Convention in Atlantic City to persuade his colleagues that this is the "last gap" in medical care toward which Congress should direct its attention.

Dr. Bateman pointed out that we have Title XVIII for the elderly, Title XIX for the poor and the only segment of medical needy are those who have no protection against catastrophes.

Had he started earlier or had larger forums for his arguments, Dr. Bateman may well have altered the course of the AMA at that session toward a more realistic direction. With strong physician support, Congress might well have acceded to this viewpoint.

A projected catastrophic health insurance bill has been drafted by Senators Russell B. Long (D-La.) and Abraham Ribicoff (D-Conn.). This bill is a revision of one offered in March, 1971, by the same Senators. With modifications, it has a good chance of being passed. Not only does the Long-Ribicoff bill boast an attractive price tag as compared to all other proposals, but it could be implemented with relative ease.

The new Long-Ribicoff bill contains some significant revisions. Title I would establish catastrophic health insurance coverage for all citizens or permanent residents of the United States. It would require appropriate deductibles after payment of which individuals would be entitled to imbursement for all hospital, medical and other health services. No coinsurance would be required.

Title II would authorize a new medical assistance plan for low income people, virtually a substitution for the Medicaid program.

Title III proposes a private basic health insurance program which would authorize the Secretary of HEW to certify private health insurance plans established through insurance pools. States would be encouraged to facilitate development of these private plans.

Title IV would include as a Medicare benefit immunizations as approved by the Secretary of HEW. This Title also makes revisions in payments for mental health services under Medicare to the Part A premium requirements, for payments for extended medical services under Medicare and the renal disease program.

Title V would combine the myriad of departments in HEW which are now involved in some phase of health care (Bureau of Health Insurance, Medical Services Administration, Bureau of Quality Assurance and Office of Nursing Home Affairs).

In its final form, the new Long-Ribicoff bill may be as obnoxious as all of its predecessors in the Congress. But in general, it appears to be a type of legislation which physicians could support if it reduced to an absolute minimum government interference in the practice of medicine and establishment of realistic benefit schedules.

No End In Sight

Are you befuddled by the fatuities of Foggy Bottom? Are you addled by the antics of Goat Hill? Then consider this:

At last count there were 1,250 advisory boards, committees, commissions and councils to Federal agencies. These were comprised of 24,000 private citizens and public officials, staffed by 4,000 Federal employees.

In 1970 Congress created a committee to advise it on whether so many advisory committees were needed. Since then, according the NATION'S BUSINESS, 216 new advisory committees have been created, 24 by acts of Congress, at a cost of $75 million per year.

A Job Well Done

A word of commendation is in order to those physicians across this great State who gave of their time and energies to the passage of H. B. 300 as amended—the Alabama Medical Liability Act.

It is a tribute to this Association that so many physicians worked together in a unified manner toward this common goal. The taste of victory was sweetened by the unity and common purpose displayed by MASA members and officers, the State Board of Censors and those physicians who served on the Governor's Medical Liability Task Force.

This success story would not be complete without proper credit going to the 141 physicians who served as "key doctors" in each Senatorial and State Representative District. It was their responsibility to personally contact their legislators, to explain important features of the bill and to obtain final commitment of support by each legislator.

durr fillauer

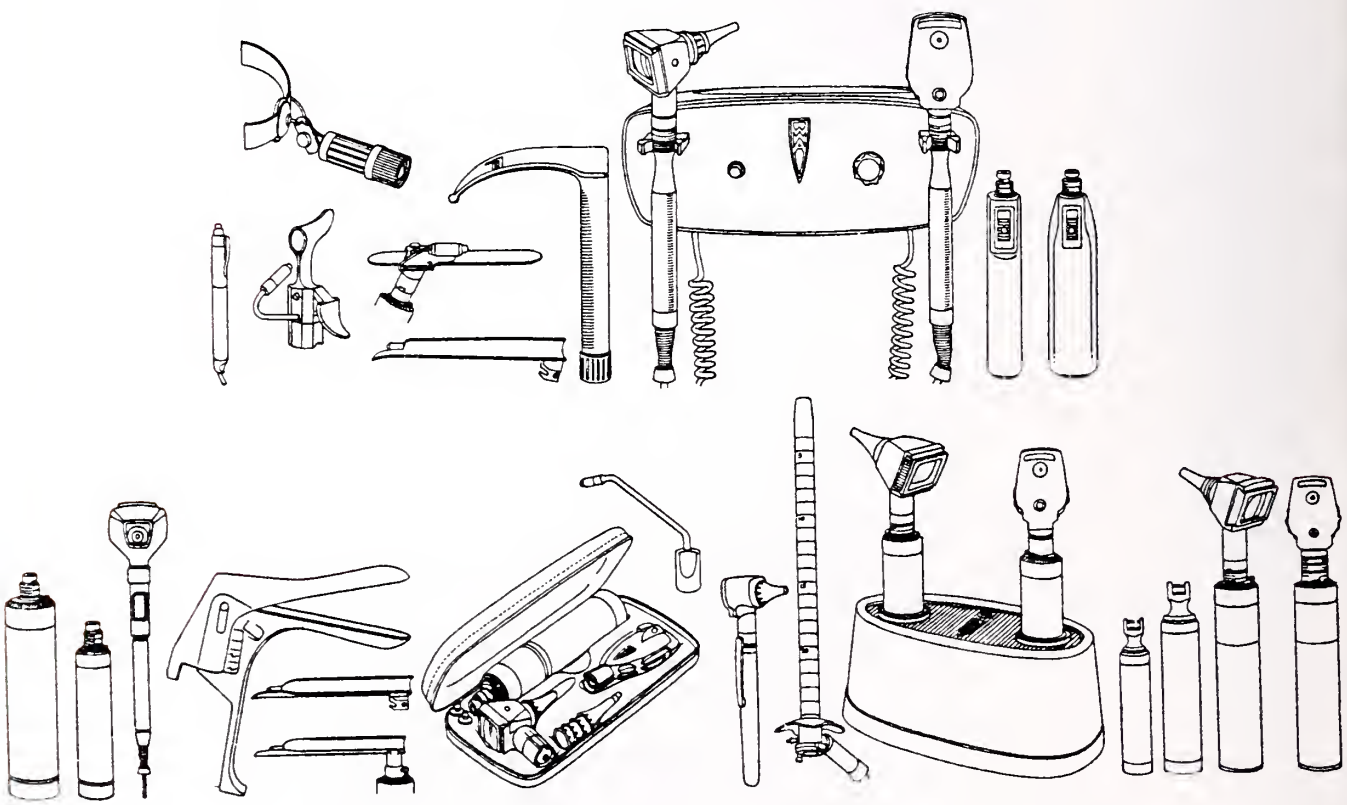
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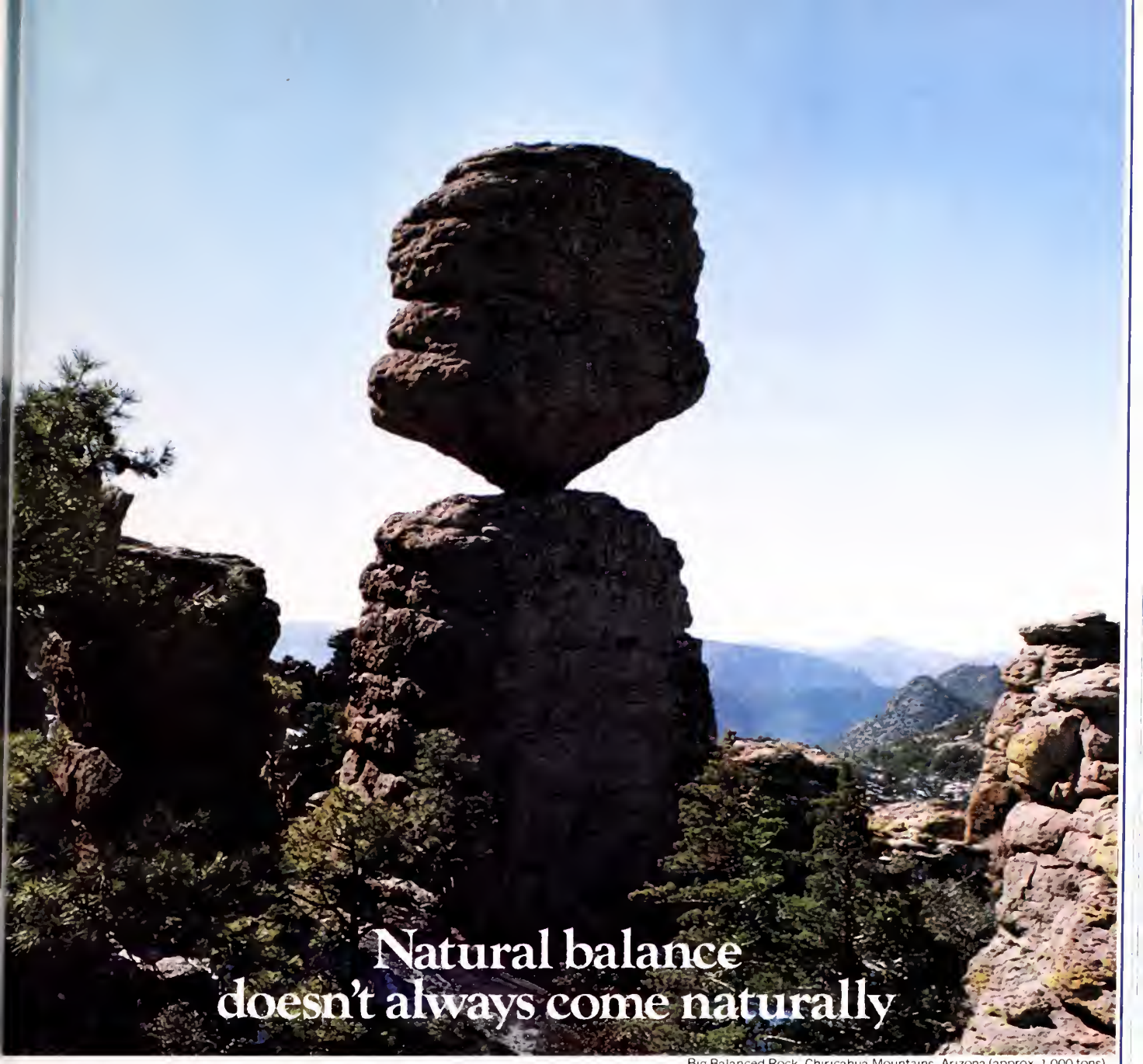
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□ Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
□ Can relieve nausea and vomiting often associated with vertigo.*
□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
□ Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
□ Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the



Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may pos-

main purpose of drug information for the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeling must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the information is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A

DYAZIDE®

Each capsule contains 50 mg. of Dyrenium® (brand of triamterene) and 25 mg. of hydrochlorothiazide.

makes sense



For long-term control of hypertension*

Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **WARNING**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium f

quently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

'DYAZIDE'

Just once or twice daily for maintenance. Hydrochlorothiazide to help keep blood pressure down and triamterene to help keep potassium levels up

Letters to the Editor

Dues Goal Exceeded

Congratulations! Alabama has already exceeded its year end 1974 dues paying AMA membership.

On behalf of the AMA, please accept our gratitude and admiration for this accomplishment. Obviously, you and your officers and trustees have worked hard to attain this membership record and your efforts have proved successful.

As you know, the AMA hit an all time high in dues paying membership in mid-August. This rise represents the third consecutive year of growth for the Association and the second consecutive year for setting membership records. If it were not for the efforts of states like Alabama, we would not have accomplished this record. We are proud of our record, and we wanted to share our pride with you and your members.

Once again, we thank you and hope you will convey to your Board of Censors, officers and members of the staff our gratitude to them, and our pride in your accomplishments.

Max Parrott, M.D.
President, AMA
Chicago

Liked Special Issue

The September 19 special issue of the *Alabama MD* on the Alabama Medical Liability Act was great.

Charles L. Rutherford, Jr., M.D.
Mobile

Kudos To Journal

Congratulations on your July, 1975 issue of the *JOURNAL.* You have every reason to be proud of the contents as well as of the publication details and the speed with which it can be printed.

I also read with interest the reports of the various committees to the Reference Committees at the annual session, and it occurs to me that the chairmen of these committees might be invited to submit an article at least once a year. This might prove of interest to some of the members who were unaware of our committees on rural health, medical aspects of sports, community affairs, etc., and might even uncover some volunteers for some of these committees.

One small point about the format is worth your consideration. I had trouble being sure of the start and of the finish of the article on malpractice by Dr. Owens starting on page 10. Could you use a slightly larger and more elaborate lettering for the first word or two to indicate the start of the article, and then some sort of a tiny drawing to indicate the end?

John M. Packard, M.D.
Associate Dean
College of Community Health Sciences
Tuscaloosa

Request From Midwest

I have read, with great interest, two articles in your August Journal and would like permission to reprint them in the October Bulletin of the Omaha Medical Society.

They are: "A Militant AMA!" by E. Vernon Stabler, Sr., M.D., (page 7) and "Alabama Housestaffer Looks At The AMA" by Rush Akin, M.D., Resident, Lloyd Noland Hospital, Fairfield (page 13).

Miss Patricia Sheehan
Executive Secretary
Omaha Medical Society
Omaha, Nebraska



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The Good Neighbor.

An employee of yours has a house fire, a disabled parent, an emergency of any kind.

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Alabama Medical Liability Act Becomes Law

Following months of planning, drafting, maneuvering and compromise, the Alabama Medical Liability Act was signed into law by Governor George C. Wallace on Tuesday, September 23, 1975. The measure was then documented by the Secretary of State as Act No. 513, to take effect immediately.

Designed to guarantee availability of malpractice insurance and to maintain reasonable rates by codifying Alabama's historically favorable court decisions, the Act began to take form last December when several different bills were drafted for consideration. These bills were a composite of ideas expressed by the AMA, other states, and insurance carriers as ways to alleviate problems faced by the insurance industry in predicting premiums they need charge in order to pay future losses.

The bills included a definite statute of limitations, a joint underwriting mechanism, a sliding scale for attorney contingent fees, an advance payments provision, a locality rule, the elimination of the ad damnum clause in pleadings, and a requirement that warranties of cure be in writing. These bills were considered in depth at a January meeting in Birmingham attended by representatives of Employers Insurance of Wausau, MASA's Board of Censors, Insurance Committee, and staff.

In February, a Congress of Health Care Providers was convened at the request of MASA and the Alabama Dental Association to consider health related legislation. At this meeting, representatives of all health fields discussed their proposed legislation. MASA's bills were discussed, including a possible comprehensive measure known as the "Patients' Compensation Act." The meeting was attended by Sen. Bert Bank, Chairman of the Senate Health Committee and it gave him the opportunity of hearing plans for upcoming legislation, which he would later sponsor.

The Patients' Compensation Act, an all encompassing bill, not only included all of the individual remedies discussed in January, but also would have taken all medical liability questions out of the jury system and placed them under an administrative board. This bill, selected by MASA's Legislation Committee and Board of Censors as the bill to be pushed in the regular Session of the Alabama Legislature, was the farthest reaching piece of legislation in the country and contained every provision which could conceivably aid the malpractice situation.

Admittedly, many of its provisions were highly questionable on constitutional grounds and the Alabama situation could not be compared to California's, but it was felt that in a Senate where 20 of the 35 members are lawyers, if MASA did not use its strongest punch at the beginning of the session, there would be no hope for any malpractice legislation.

Accordingly, the Patients' Compensation Act was introduced in both houses of the Legislature on the first day of the Session, and was sponsored by Senator Bank in the Senate and Dr. Dewey White, Jr. in the House.

Governor Wallace had appointed a Medical Liability Task Force of physicians, dentists, attorneys and hospital administrators to study the problem and make recommendations both to him and to the Legislature, but as the Regular Session of the Legislature began, the Task Force had not met. With the omnibus Patients' Compensation Act moving into the health Committees of both houses, the Governor's Task Force held an organization meeting and determined to spend the time and effort necessary to make a recommendation to the Governor during this session.



Gov. Wallace places his signature upon the Alabama Medical Liability Act while witnessed by (l-r) Dr. C. M. Tyndal, Rep. White, M.D., and Sen. Bank.

At the same time, the Patients' Compensation Act was coming under heavy attack both from attorneys who claimed that the largest jury award against a doctor in Alabama's history was $50,000 and laymen, who claimed that the legislation would put doctors in a more protected class under the law than other people. Supporters

of the Patients' Compensation Act countered with arguments that most cases in Alabama are settled out of court and that only one insurance carrier would still write new malpractice policies in the state.

The Patients' Compensation Act was stalemated in both health committees pending a recommendation by the Governor's Task Force.

The Governor's Task Force spent many days working on the problem and was shocked during one meeting by a representative of Employers of Wausau, who in response to a question, stated that if the Patients' Compensation Act passed, Wausau would pull out of Alabama. It then became clear to everyone, including the opposition, that the Patients' Compensation Act was merely a vehicle to get the legislative process moving and to focus attention on the problem.

Wausau's position was that Alabama case law is the best in the country and to establish an administrative board to hear and determine claims would inject unknown variables into the Alabama situation.

With this in mind, the Task Force recommended the "Alabama Medical Liability Act" which contained all of the original provisions which MASA's representatives and Wausau's representatives had discussed in January. The Task Force recommended several provisions of its own, including a ceiling on damages and the abolishing of the scintilla rule of evidence which requires a case to go to a jury if there is a spark of evidence to support the plaintiff's case.

The Alabama Medical Liability Act was substituted for the Patients' Compensation Act and was reported favorably out of both health committees on the condition that MASA work with representatives of the opposition on the controversial provisions. At this same time five members of MASA's staff toured the state, meeting with physicians and giving them information on the Act, objections to it and arguments in support of it, so that they could make effective contacts with their local legislators.

In this way, a one-on-one campaign was established with a key doctor assigned to each legislator. The doctor would contact the legislator, familiarize him with the Act, and urge his support of the bill. A master file was kept at MASA headquarters on the position of each legislator and the reasons, if any, expressed for opposition. Concentrated effort was then focused on the opposition.

The one-on-one campaign had probably its greatest effectiveness in getting the Alabama Medical Liability Act in position for consideration. With the calendars in both houses being over an inch thick and containing literally thousands of bills, it was necessary to secure favorable position on the "special order" calendars of both houses. The speed in which the highly controversial Alabama Medical Liability Act attained top priority on both "special order" calendars surprised everyone, especially the opposition. It took only two legislative days for the Act to secure top billing on the special order calendar of the House and to pass.



Senators Bank (left) and Powell "all smiles" following important Senate passage of the bill.

The speed so surprised the opposition that attorneys were frantically searching for amendments to the bill to introduce on the floor. Following the earlier deletion of constitutionally objectionable portions of the bill, such as the ceiling on damages, and the increased burden of proof in medical liability actions, along with several minor amendments, the House passed the Act 84-4 and it was sent to the Senate.

In the Senate, the House version of the bill again secured an immediate top priority on the special order calendar. Without time to sway the bill's supporters, the opposition was left with no means to fight other than to filibuster.

The filibuster was led by Sen. Richard Shelby of Tuscaloosa who was aided by Sens. John Baker of Rainsville, Sam Adams of Dothan, Bingham Edwards of Decatur and Mike Perloff of Chickasaw, all of whom are attorneys. The Act was ably supported by Senators Bank, George McMillan, Jerry Powell, Joe Fine, Crum Foshee, Fred Jones, Sid McDonald, Red Noonan, Finis St. John, Bo Torbert and Gerald Waldrop. Pressure mounted to break the filibuster since it was also blocking the Judicial Article bill which had the heavy support of attorneys. Knowing that on the next legislative day the Senate would begin work on the budget bills and might remain on them for the remainder of the session thereby killing any chance of passage for the Act and for the Judicial Article bill, an agreement was reached. The filibuster ended and the provision abolishing the scintilla rule was deleted, and a continuing subcommittee of the Senate Legislation Council was appointed to study and keep abreast of the malpractice insurance problem and to recommend legislation needed in the future. The Act then passed the Senate 28-2.

By a vote of 65-1, the House then concurred to the Senate amendments and thus paved the way for it to be signed by the governor.

The Alabama Medical Liability Act contains every provision which MASA's and Wausau's representatives considered in January with the exception of a contingent fee regulation. As a practical matter under the Alabama Constitution, contingent fee regulation will probably have to be accomplished by a rule of the Supreme Court rather than by statute.

The provisions of the Alabama Medical Liability Act, as enacted into law, are as follows:

Legislative Finding

The Act contains a specific declaration by the Legislature that by reason of complicated and highly technical medical concepts, and the existence of sophisticated medical techniques, decisions with respect to optional procedures of diagnosis and treatment have become increasingly complex and are necessarily made on the basis of professional judgment on which opinions may and often will reasonably vary.

Statute of Limitations

The Act contains a definite statute of limitations. In the average case, the statute will be two years; however, if a reasonable man would not have discovered the negligence within two years, the patient will have six months from the date of discovery, but under no circumstances more than four years from the date of the act of negligence. The statute for persons under a legal disability (minors, incompetents, prisoners, etc.) will be four years, except that a minor under the age of four will have until his eighth birthday. This provision allows insurance companies to calculate with a definite four year statute (eight years in the case of a newborn infant) in place of statute which can presently run for twenty years. This will effectively abolish the "long tail" in Alabama.

Ad Damnum Clause

The ad damnum clause in complaints alleging medical liability is eliminated. No longer will a doctor or hospital be sued for "$500,000" or "$1,000,000" thereby gaining all of the headlines across the state. From now on, the complaint will merely reqest all the relief to which the plaintiff is entitled, and the attendant publicity will be greatly reduced.

Standard of Care

The codification of Alabama's case law definition of the standard of care is probably the most important provision which the Alabama Medical Liability Act contains. As stated earlier, Alabama has the best case law in the country as it relates to medical liability.



During House deliberation of Senate amendments, Rep. Gafford led the fight for House concurrence by landslide margin.





Senators St. John (top) and Noonan (bottom) carefully study bill's provisions and amendments prior to floor vote.

The expansion of the definition of malpractice by the courts in other states to the point that a physician has become a guarantor of good results has been a major cause of the malpractice crisis.

Under this provision, by statute in Alabama, a physician's duty to the patient shall be to exercise such reasonable care, diligence, and skill as physicians in the same general neighborhood, and in the same general line of practice, ordinarily have and exercise in a like case. The provision also contains the requirement that neither a physician, a dentist, nor a hospital shall be considered an insurer of the successful issue of treatment or service.

This provision has three major benefits. First, the ideal definition of malpractice is locked down by statute. Second, it contains a restrictive locality rule because a physician testifying as an expert witness will have to testify as to the standard of care exercised by physicians in the same general neighborhood as the defendant. Third, the requirement that a physician not be considered an insurer of the successful issue of treatment in connection with a recent decision by the Alabama Supreme Court rejecting the theory of implied warranties to exercise due care abrogates the need for a requirement that warranties of cure be in writing.

Joint Underwriting Association

This provision is, in effect, a failsafe mechanism. If all else fails, and the malpractice insurance crisis reaches Alabama, a joint Underwriting Association will be triggered and will write medical liability insurance. The JUA will be comprised of all property and casualty insurers (including Allstate, State Farm, Farm Bureau, etc.) and will guarantee the availability of medical liability insurance in Alabama.

Arbitration

This provision enables a provider and a patient to agree to settle a dispute by arbitration. The agreement must be voluntary, but will be valid, binding, irrevocable and enforceable. Each party will select one neutral arbitrator and the two arbitrators will select a neutral third arbitrator. Proceedings will be conducted pursuant to the provisions of the American Arbitration Association and the decision in writing of two of the arbitrators will be binding on all parties.

Reporting Requirement

Insurance carriers will be required to make annual reports to the Insurance Commissioner of the number of claims and the cost incurred. This will serve two basic functions. First, the Insurance Commissioner will have definite facts and figures before him when rate increases are requested, and will be able to more accurately determine if such increases are justified. Second, the subcommittee of the Senate Legislation Council will have the facts and figures necessary to determine what legislation may be needed in the future.

Periodic Payments

Where an award is in excess of $100,000, under this provision, the judge may order that the award be paid in installments. The judge can use this provision where he feels, for example, that a plaintiff will spend the award on a house and five Cadillacs rather than on continuing medical expenses. He can also apply this provision where the defendant either does not have insurance coverage or where the award exceeds the limits of his policy.

Advance Payments

The insurance company can make advance payments to patients in legitimate cases to help offset expenses such as medical bills without such payments being construed as an admission of liability. This will help insurance carriers to settle legitimate cases without having to go to trial.

Writing Requirement

This provision will prohibit insurance companies from "skimming off the cream" in Alabama while writing medical liability insurance in other states. Under this provision, if a company is writing medical liability policies in other states, it must, as a condition of doing any business in Alabama, write medical liability insurance here. This provision will have an immediate effect on a number of companies which have been cancelling medical liability policies in Alabama.

Conclusion

The Alabama Medical Liability Act is the result of a long, hard fight which began last December. It is a piece of legislation which is tailored to suit physicians' and hospitals' needs in Alabama. Availability of insurance will be guaranteed and Alabama's favorable position under the law will be secured by this Act.

There will be appointed a continuing subcommittee of the Senate Legislation Council to keep abreast of the malpractice insurance situation and recommend any needed legislation in the future.

All of this is the direct result of local, home-town doctors getting involved and taking the time and effort to become educated with regard to the malpractice insurance problem, its background, its solutions, and then contacting their legislators.

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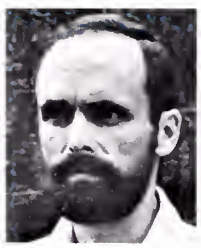
More and more professional people are taking up the sport to combat their sendentary ways at the office. Unfortunately, too many are ordered to do so by their doctor.

Doctors themselves are not immune from heart disease and many are discovering that they need to "practice what they preach" for their own good health.

The Journal recently visited with two of MASA's more notable jogging enthusiasts. Both physicians are busy professionals who somehow manage to find time each day to run. Both have slim waistlines; neither smokes. Both have at one time or another participated in cross-country and marathon running events.



BECK



ROBERTSON

Dr. Jere L. Beck has a solo practice in obstetrics and gynecology at Troy. He is a 1969 graduate of UAB School of Medicine. He completed his internship and residency at Lloyd Noland Hospital in Fairfield.

His office is located within a stone's throw of the track facilities of Troy State University where he runs each day after the office is closed. He and his wife have one child and they are expecting another in late December.

Dr. Adam Robertson, Director of Emergency Services, Cooper Green Hospital, Birmingham, and his family came to Birmingham in July, 1974. He graduated from the University of Arkansas School of Medicine in Little Rock where he also completed his residency.

He and his wife have three children and they make their home in Mountain Brook. Dr. Robertson runs to and from work each day—a distance of about 18 miles.

JOURNAL: When did your interest in jogging begin?

DR. BECK: Initially in high school, since I was too small for football and too short for basketball. I gave it up in medical school until my first year of residency. At that time, I had gained 35 pounds and my doctor put me on a diet and told me to start exercising or I was headed for trouble.

DR. ROBERTSON: My interest began during my internship at Lackland Air Force Base where Dr. Kenneth Cooper was doing his research on Aerobics. I was so impressed with his program and exercise philosophy that I decided to give jogging a try. I've been running ever since.

JOURNAL: Aerobics? Isn't that the exercise program currently being used by the U.S. Air Force?

DR. ROBERTSON: Yes. Basically, it promotes cardiopulmonary reserve through slow, long distance running. By making demands on the heart, the blood vessels are constantly being strengthened to maintain a caliber which decreases the possibility of arteriosclerosis.

DR. BECK: Right. A good way of understanding it is to apply the word "efficiency." Once trained, your heart rate doesn't increase as fast as if you were a newcomer to running. Your cardiovascular system operates more efficiently. And it lowers your blood pressure.

JOURNAL: Do you think in terms of distance when jogging?

DR. ROBERTSON: The beauty of Aerobics is that it does not require that you run a certain distance within a required time. Individuals vary, as do their running abilities.

DR. BECK: It is more desirable to develop a pulse rate of 120 or greater and then do what is necessary to maintain that rate than to push yourself toward distance goals.

DR. ROBERTSON: What we are trying to say is that running should be a pleasant and invigorating experience, not a demanding ritual.

JOURNAL: With these things in mind, what advice can the two of you give to other physicians who are just starting a program of their own?

DR. BECK: First, start with a physical.

DR. ROBERTSON: I second that. Anyone with heart disease should run under the direction of an exercise-oriented internist or cardiologist.

DR. BECK: Start slowly, even if you start by walking. Remember that this is something you build into, not take by force overnight. Make it gradual.

DR. ROBERTSON: Get a good pair of shoes. Most people overlook this vital point.

JOURNAL: Both of you, then, are definitely sold on the health advantages to a jogging program?

DR. BECK: Speaking frankly, I cannot think of any other physical exercise which can do so much for the whole body. It just makes you feel better, sleep better; no sluggish feeling. I firmly believe in "healthy body, healthy mind."

DR. ROBERTSON: Yes. I am convinced that running forces one to avoid some habits that contribute to bad health, such as overeating, smoking, and poor sleep habits, among others. I think Dr. Beck will agree with me that we are not trying to promote running for the sake of entering track events. Rather, we want other physicians to see that our enthusiasm is contagious and that they, too, can improve their health and strengthen their cardiovascular system through a serious running program.

JOURNAL: With your busy schedules, when do you find time to run?

DR. BECK: I run in the late evenings before going home for supper. It is a good time for me to "unwind." I run with three others over at the University. We run at a relaxed pace, called a "conversational jog," for a distance of eight to ten miles a day.

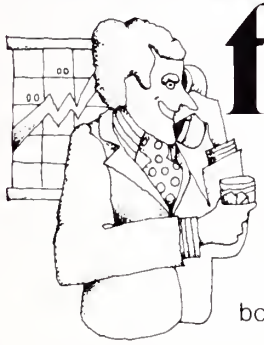
DR. ROBERTSON: My schedule plus the distance from home to the hospital afford me the chance to run to and from work. I run alone since few of my neighbors can be coaxed into running to Birmingham each day. However, on weekends, several of us run a local golf course at a pace where we can casually talk.

JOURNAL: Finally, you both have participated in track events. What were some of these events and what have been your best times?

DR. BECK: I usually manage to enter track contests three to four times a year, such as the Senior Bowl Track Meet in Mobile and the State Masters Track-and-Field Championship in Montgomery. My best time in the mile is 4 minutes and 38 seconds.

DR. ROBERTSON: Last April, I competed in the Boston Marathon. I placed in the middle of the pack of about 2,200 runners. My finishing time was 3 hours and 24 minutes. Then in June, at the Terre Haute, Indiana, Marathon, my running mate was a 54-year-old local physician. He was 20 years my senior and he beat me by more than three minutes. He was a marvelous example to me that we never get too old to run.

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Sudden Infant Death—A Devastating Syndrome

Thomas M. Chase, M.D.*

The sudden infant death syndrome (SIDS) can be considered a distinctive entity which follows a fairly consistent clinical, epidemiologic, and pathologic pattern. For this reason, SIDS may be considered a definite clinical entity. A working definition of the syndrome is described by Dr. Russell S. Fisher, Chief Medical Examiner of Maryland as follows:

> "the death of any ostensibly healthy infant or young child which occurs suddenly and unexpectedly and which remains unexplained after postmortem examination. The infant must have been healthy, meaning that no serious illness or injury was found during pregnancy, delivery, or infancy. It also refers to the absence of any premonitory symptoms or to where symptoms where so insignificant, of short duration, and of such character that a fatal outcome was not expected. The deaths must occur suddenly, and more importantly, they must be completely unexpected. Finally, the death remains unexplained after complete autopsy and case work up."

The mere definition of the syndrome should give any empathetic observer some idea of the devastating emotional consequences to the families involved. Human nature is to make an attempt to explain the cause of the death of one's infant, and in these cases one naturally develops guilt and anxiety over real or imagined events preceding the death of the apparently healthy infant.

In 1973, approximately 59,000 births were recorded in Alabama. During the first year of life, ten infants died of the sudden infant death syndrome while 45 others were listed as crib deaths. These figures in no way feflect the true incidence of SIDS in Alabama since pneumonia, unexplained causes, and other vague diagnoses are often placed on the death certificates.

For the first time in 1974, the Alabama Bureau of Vital Statistics listed SIDS as an official cause of death, and gave it the distinction of having a category number and listing. Of the 59,342 live born in 1974, sudden infant deaths were recorded for 74 infants, an incidence of 1.25 per 1000 live born. This figure may still not be accurate, as it is felt that the national incidence is 3-4 per 1000 live born.

While of course the true cause remains to be defined, at least the syndrome is now recognized as a true entity. Recent congressional legislation in the form of the Sudden Infant Death Law of April 22, 1974 directs the Department of Health to carry out research specific to crib death and to make annual reports to Congress. The two most prevalent theories of etiology are related to an overwhelming response to a respiratory virus, perhaps leading to a nasal obstruction or laryngospasm and the thorty of prolonged sleep apnea.

Promising research is also being carried out on abnormalities of the central nervous respiratory control centers, and attempts are being made to better understand the vulnerability of the autonomic nervous system as well as the immunologic system of the infant. With better knowledge of the physiology of sleep and appreciation of sleep apnea problems, definite progress has been made in SIDS research.

My current interest in Sudden Infant Death is twofold. First, I would like to be in a position to provide the grief stricken family of a probably SIDS victim with reassurance and with literature from the National Foundation of Sudden Infant Death and from the International Guild for Infant Survival. This information is of tremendous value to the distressed family in helping with the conflicts of the tragedy, and it should be provided as soon as possible after the death. Secondly, I would like to obtain information from all SIDS families in Alabama as soon as possible after their loss to understand better the incidence and the epidemiologic factors associated with the syndrome.

In an attempt to provide this service to the parents and to obtain the necessary information, I will request Alabama physicians to alert me to any case which fulfills the definition of Sudden Infant Death and to give my home and office phone numbers to any patient who would seek the information which I might provide. I will from time to time publish a reminder of my project in *The Alabama MD*. I hope to make this a prospective project of ten years duration.

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Smoking And Serum Triglycerides

W. M. Ringsdorf, Jr., D.M.D., M.S.,
E. Cheraskin, M.D., D.M.D. and F. H. Medford, B.S.*

Introduction

Blood lipids, cholesterol, triglycerides and phospholipids are transported as a complex with alpha and beta lipoproteins. Increased concentrations of these complexes are grouped into six types of hyperlipoproteinemia [Types I, IIa, IIb, III, IV and V]. Types IIa, IIb, III and IV are clearly associated with cardiovascular disease. Elevated serum triglycerides are a feature of Types IIb, III and IV. Thus, hypertriglyceridemia predisposes to the development of atherosclerosis and is regarded as an important risk factor[1,2].

Although serum chemistry tests have been compared in smokers and nonsmokers[3-6], our cursory review of the literature has failed to identify a publication showing a significant effect of smoking upon serum triglycerides. Concerning serum cholesterol, the general concensus is that the mean level is higher in smokers[3,4,6].

Method

On the basis of a health questionnaire, biochemical analysis and an electrocardiogram, each subject was judged to be in a reasonably good state of health.

The daily cigarette smoking habits of 1101 doctors and their wives were determined by a questionnaire and divided into three categories: 0-10 cigarettes per day versus 11+, 0-20 versus 21+ and 0-10 versus 21+.

Following a twelve-hour fast, each participant's blood was analyzed to determine the serum triglycerides[7].

Results

The effect of smoking upon serum triglycerides is shown in the accompanying table.

It is readily apparent that the heavier smokers have higher serum triglyceride levels. In each category, the upper limit of the laboratory normal range [150 mg. per cent] was exceeded by the heavier smokers.

Those smoking 11 or more cigarettes daily had a mean serum triglyceride level [174.95 mg. per cent] that was significantly higher [$P<0.25$] than the level in the group smoking 0-10 cigarettes daily [145.25 mg. per cent].

Statistical analysis for the mean serum triglyceride difference between those smoking 0-20 cigarettes per day versus 21+ and 0-10 cigarettes versus 21+ just escaped the five per cent confidence level of statistical significance [$P>0.050$].

Discussion

The finding of a higher serum triglyceride level in the heavier smokers is a risk factor in their cardiovascular disease prognosis. Additionally, smoking has been found to increase serum cholesterol and serum glucose[3,4,6]. These are also considered to be cardiovascular risk factors. Therefore, the elevation of serum triglycerides observed in this report is consistent with the body of data which links smoking to ischemic heart disease and other cardiovascular disorders.

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*Department of Oral Medicine, University of Alabama in Birmingham.

Relationship Between Serum Triglycerides and Daily Cigarette Consumption

Less Tobacco		More Tobacco		Percentage Change	T	P
n	0-10 cigarettes	n	11+ cigarettes			
947	145.27±130.65	110	174.95±122.28	21	2.391	< 0.025*
n	0-20 cigarettes	n	21+ cigarettes			
991	147.23±131.79	73	171.58±110.61	18	1.789	> 0.050
n	0-10 cigarettes	n	21+ cigarettes			
947	145.27±130.65	73	171.58±110.61	19	1.930	> 0.050

(*STATISTICALLY SIGNIFICANT DIFFERENCE OF THE MEANS MAY 1975)

How To Set About Diagnosing Malabsorption

Thomas W. Sheehy, M.D.*

Does the patient suffer from malabsorption? If so, what caused it? These questions puzzle many physicians only infrequently faced with patients whose history and symptoms suggest this condition. Their puzzlement is understandable. At least 25 diagnostic tests exist for malabsorption, and more than 50 disorders can cause it (Table). There are screening tests, relatively specific malabsorption studies, and ancillary tests, such as those for serum B-12, cholesterol, secretin, and gastrin, to name only a few. Malabsorption may be caused by mucosal defects, drugs, blockage, infections, inflammation, and, among other diseases, pernicious anemia. Despite all this, the questions at the beginning of this article are not impossible to answer.

Step 1

First, *you must know the difference between disorders causing maldigestion and those causing malabsorption directly.* (Inadequate digestion, of course, can result in malabsorption). Maldigestion occurs when the intestinal lumen is unable to break down nutrients into compounds small enough to be absorbed. This inability can result from malfunction of the stomach, pancreas, liver and gall bladder, the endocrine system, and from conditions such as diverticulosis, scleroderma, and diabetes.

Pancreatic insufficiency results in a failure to produce enough lipase to hydrolyze fat; the excess acid caused by the Zollinger-Ellison Syndrome impairs pancreatic enzyme activity; in lesions causing bowel stasis, bacterial overgrowth leads to bile-acid deconjugation, which results in an impairment of the ability to form micelles. With the exception of the ZE Syndrome, none of these disorders produces a mucosal lesion.

In disorders of malabsorption, mucosal lesions are prominent. Disorders of malabsorption result from the loss of the mucosal surface, injury or destruction of epithelial cells, the blockade of such subepithelial structures as the lymph glands, or the breakdown of transport mechanisms. In celiac sprue, the mucosa is injured by the toxic action of gluten; in lymphoma and Whipple's disease the intestinal lymphatics are blocked; in giardiasis, absorption is blocked by parasites, overlaying the mucosa, and in lymphangectasis the lymph flow is impaired.

Mucosal lesions are rare in disorders causing selective malabsorption, i.e., failure to absorb or to digest specific substances, such as Vitamin B-12 or lactose.

Step 2

A good history and physical examination can implicate some and eliminate many of the suspected causes of malabsorption. A history of childhood illnesses characterized by diarrhea, or delayed growth, suggests celiac disease or milk intolerance. Diarrhea in a diabetic patient with neuropathy suggests diabetic enteropathy. Previous gastric or intestinal surgery can result in a bacterial overgrowth causing diarrhea, bile deficiency, or steatorrhea. Diarrhea occurring after the patient has toured the tropics suggests tropical sprue, dysentery, or parasitic infestation. Repeated bacterial infections accompanied by steatorrhea suggests dysgammaglobulinemia. Extensive pelvic radiation can cause enteritis; recurrent pleuritis and arthritis followed by diarrhea suggest Whipple's disease.

TABLE

			Mechanism
I.	Disorders of Maldigestion		
	Stomach	Gastric resection	Surgery
		Gastro-colic - gastroileal fistula	
		Postvagotomy steatorrhea	
	Pancreas	Pancreatic insufficiency	Insufficient pancreatic enzymes
		Pancreatic islet cell tumor	
		Carcinoma-head of pancreas	
		Cystic fibrosis	
		Protein deficiency states	
	Hepatobiliary	Biliary tract obstruction	Insufficient bile salts
		Chronic parenchymal liver disease	
	Endocrine	Thyrotoxicosis	?
		Hypoparathyroidism	
		Addison's disease	
		Sheehan's syndrome	
	Miscellaneous	Diverticulosis	Bacterial overgrowth
		Blind loop syndrome	Bacterial overgrowth
		Scleroderma	Stasis & bacterial overgrowth
		Diabetes Mellitus	Stasis & bacterial overgrowth
II.	Disorders of Malabsorption		
	Mucosal Defects	Tropical sprue	? infection
		Celiac sprue	Gluten toxicity
		Lymphangiectasia	Congenital
		Short bowel syndrome	Surgery
	Drugs	Neomycin	Toxicity
		Colchicine	Impairs cell proliferation
		Paramino salicylic acid	Impairs cell proliferation
		Methotrexate	Impairs cell proliferation
	Blockade	Whipple's disease	? infection
		Lymphoma - carcinoma	Infiltration
		Amyloidosis	Infiltration
		Carcinoid	Infiltration
	Infections	Viral enteritis	?
		Giardiasis	?
		Strongyloides	Inflammation
		Capillariasis	Inflammation
	Inflammatory	Regional enteritis	?
		Radiation enteritis	X-ray
	Selective Disorders	Pernicious anemia	Lack of intrinsic factor
		Abetalipoproteinemia	Enzyme deficiency
		Disaccharidase deficiency	Enzyme deficiency
		Monosaccharide malabsorption	Transport failure
		Cystinuria, Hartnup's disease	Transport failure

And examine: two to 20 per cent of adults with malabsorption also have a skin disease (but only 2 per cent of those with eczema and psoriasis have the malabsorption syndrome). Dermatitis herpetiformis causes a jejunial lesion identical to that caused by celiac disease; erythema nodosum is associated with regional enteritis and ulcerative colitis. A lack of fat soluble vitamins can cause a bleeding tendency. To find intestinal disease, palpate the loops of the small bowels with both hands.

Some other signs of malabsorption are osteomalacia, hypocalemic tetany, macroglossia, loss of lingual papillae, generalized lymphadenopathy, and physical wasting.

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Step 3

But what if the history and physical examination do not result in a diagnosis? Then, you should do certain screening tests. **Examine the stool.** If the stool is a pale, porridge-like, greasy, and foul smelling, suspect steatorrhea; however, this does not appear in all patients with malabsorption. If the stool smells like sour milk, suspect fermentation diarrhea; like ammonia, suspect proteus infection. If it has no odor, suspect an overgrowth of staphylococcus. If the stool has a low pH, suspect lactase deficiency or a bacterial stasis syndrome.

Do a stool fat test. A microscopic examination of a fecal smear stained with Sudan III takes only minutes. If you find more than six globules of fat per low power field, the test suggests steatorrhea. This test identifies malabsorption in about 75 per cent of patients. It is also positive, however, in patients who have ingested copious amounts of mineral or castor oil, or the mayonnaise used in diabetic diets. Acidifying the stool with a 36 per cent solution of acetic acid and heating it before adding the stain precipitates fatty acids and increases the number of fat globules. Although a positive test indicates steatorrhea, it does not, of course, differentiate disorders of maldigestion from disorders of malabsorption.

Steatorrhea is considered synonomous with malabsorption because it occurs in almost all diseases that cause malabsorption. Three exceptions are: primary glucose malabsorption, aminoacid deficiencies and defects of B-12 transport.

Check for meat fibers. A stool with more than 10 meat fibers per coverslip preparation, in a patient on a normal diet, is another indication of malabsorption.

Check for parasites. You can easily see amebae, giardia and other parasites that cause intestinal disturbances.

Do a turbidity test. Take a fasting serum, then have the patient drink a milk shake, preferably with 40 per cent cream. Check for alimentary lipemia by taking specimens 1, 2, and 3 hours afterwards and comparing them with the specimen taken after fasting. If fat absorption is normal, the postprandial serum will be lactescent. If no change is apparent, compare all samples in a Klett photometer set at 620u wave length. A 0.1 rise in optical density, over that of the fasting serum, is considered normal. The sera of more than 80 per cent of patients with sprue do not show this rise.

Do water tests. Have a fasting patient urinate, then drink 20 ml of water per kilogram of body weight. Collect urine for 4 hours. Ordinarily, 75 per cent of the water will be excreted. A lesser amount indicates malabsorption, Addison's disease, congestive failure, myxedema, or cirrhosis. Most of these diseases are easily distinguished from malabsorption. However, malabsorption causes nocturnal diuresis in about 90 per cent of patients with tropical sprue and steatorrhea.

Step 4

Other lab tests. Office tests do not always reveal malabsorption or steatorrhea. More sophisticated screening tests may be necessary. Order tests for d-xylose excretion levels, serum carotene levels and Vitamin A tolerance. Abnormal results in all these tests correlates with a 72-hour chemical test for steatorrhea 95 per cent of the time. D-xylose excretion is normal in patients with pancreatic insufficiency and abnormal in those with sprue, renal disease, ascites and maldigestion associated with bacterial overgrowth. These tests are not so accurate as the 72-hour fecal fat analysis, but they are less expensive and malodorous.

And still more laboratory tests. If neither clinical findings nor screening tests result in a diagnosis, you may need to order the following laboratory tests:

1. **GI examination and chest x-ray study.** An examination of the entire gastrointestinal tract may reveal evidence of discrete disease or the deficiency pattern from generalized malabsorption. Chest x-ray studies are important if you suspect tuberculosis or lymphoma.

2. **Jejunal biopsy.** A microscopic study of the jejunal mucosa can show distinct features to identify hypogammaglobulinemia, Whipple's disease, eosinophilic gastroenteritis, primary lymphoma, the ZE syndrome, collagenous sprue, lymphangiectasia and abetalipoproteinemia.

3. **Lactose and sucrose tolerance.** Order tests for lactose and sucrose tolerance if you suspect disaccharidase deficiency. Blood glucose levels are measured over a 2-hour period after the patient receives the suspect sugar. Failure to rise 15 mgm per cent above the fasting glucose level, suggests enzyme deficiency. Patient with this condition usually develops intestinal cramps or diarrhea during the test.

4. **Schilling Test.** Patients with bacterial overgrowth have abnormal results in the Schilling test even after they receive intrinsic factor. Treatment with tetracycline reverts results to normal, temporarily.

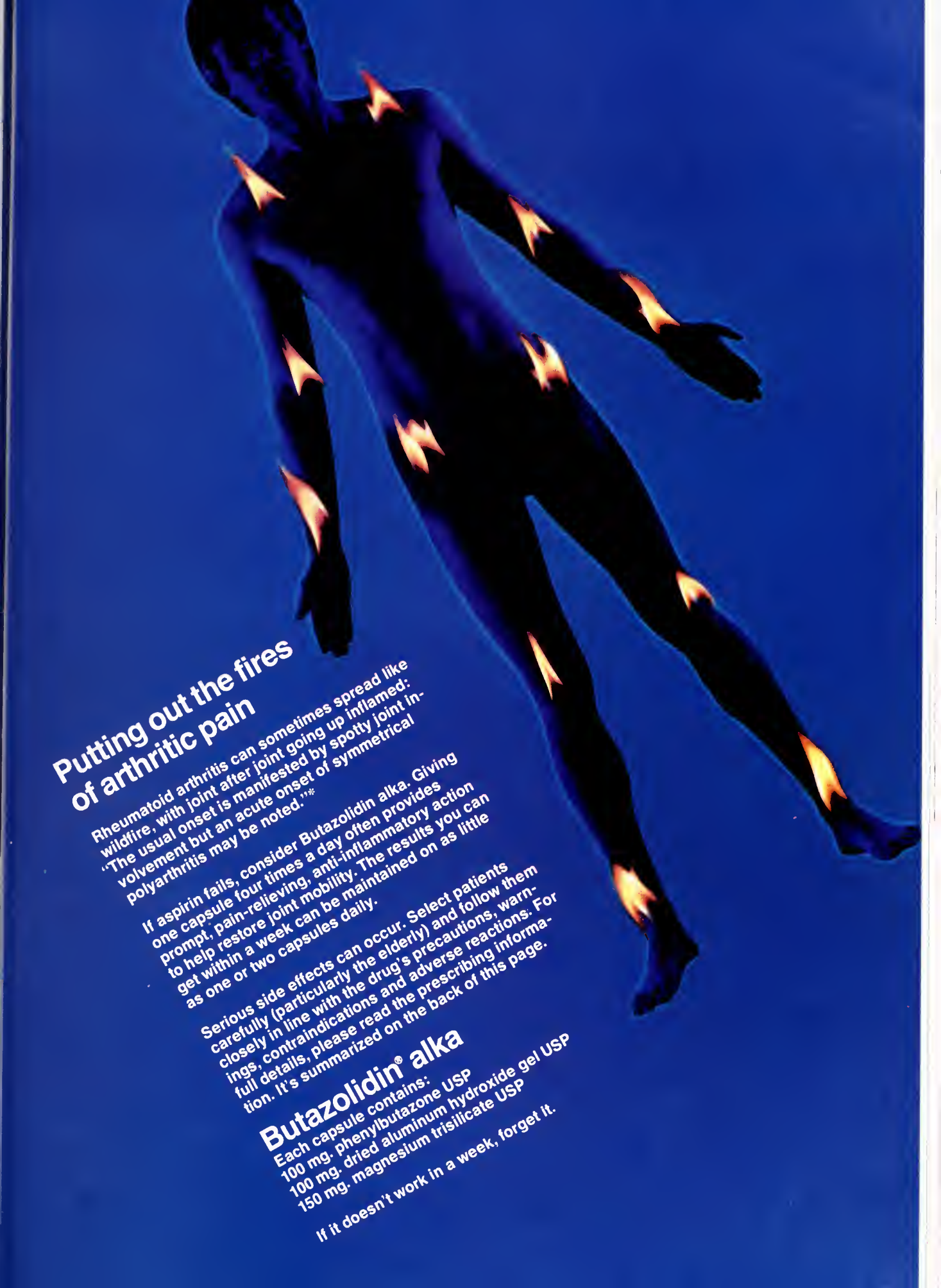
5. **Cultures.** Aspirating and culturing fluid from the small bowel can reveal bacterial overgrowth. This is a simple procedure and only a sterile nasogastric tube is necessary. Normal bacterial concentrations seldom exceed 10^3 of 10^4 ml of fluid. If bacteria are overgrowing the small bowel, concentrations reach 10^9 of 10^{12} of fluid.

6. **Secretin-pancreozyme test.** Order this test if you suspect pancreatic exocrine function. Pancreatic enzyme replacement also helps distinguish pancreatogenous steatorrhea from other forms.

Step 5

Finally, therapeutic trials. You may need to do a therapeutic trial to differentiate diseases characterized by flat mucosal lesions. Treating an accompanying giardia infection may lead to mucosal healing and the remission of symptoms in hypogammaglobulinemia sprue. Celiac sprue and dermatitis herpetiformis respond to a gluten free diet; tropical sprue to folic acid and broad spectrum antibiotics; Whipple's disease to antibiotics; Kwashiorkor to milk and a protein rich diet; and disaccharidase deficiency to the removal of the offending sugar from the diet.

Except for certain rare disorders associated with malabsorption or maldigestion, these steps almost always lead to a correct diagnosis.



Putting out the fires of arthritic pain

Rheumatoid arthritis can sometimes spread like wildfire, with joint after joint going up inflamed: "The usual onset is manifested by spotty joint involvement but an acute onset of symmetrical polyarthritis may be noted."*

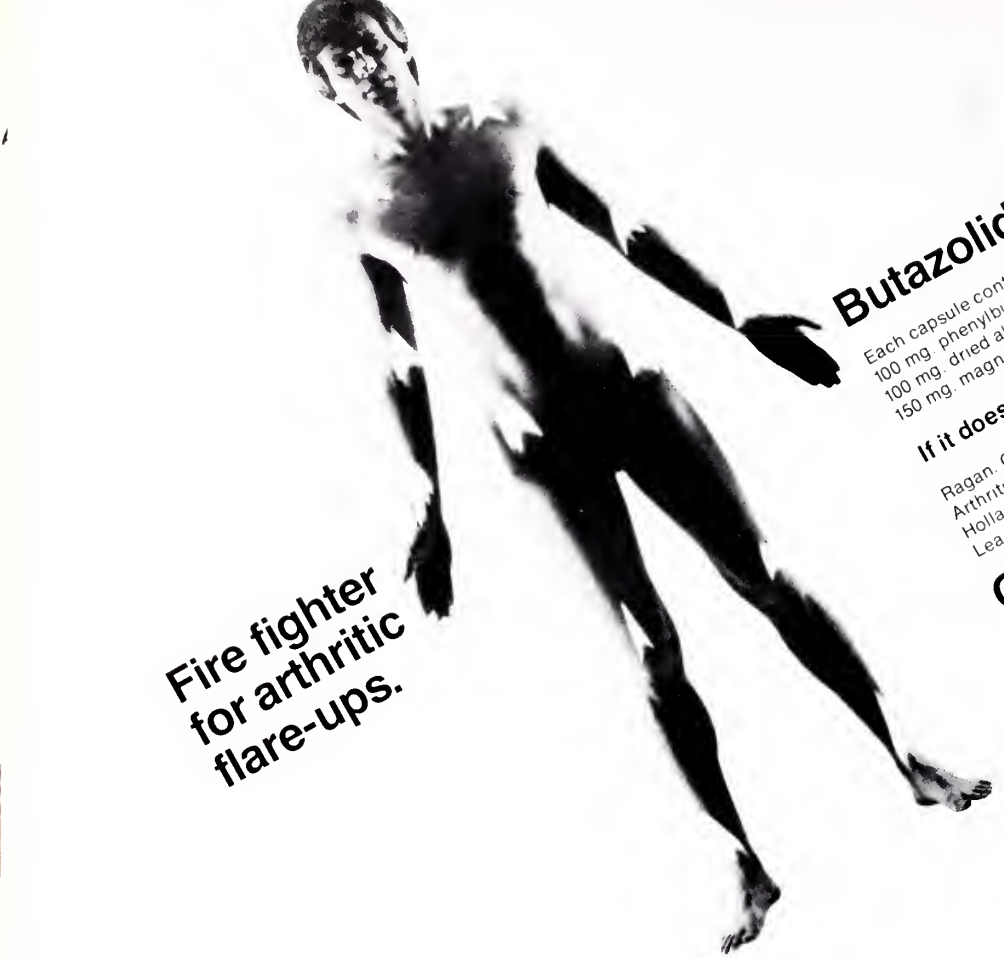
If aspirin fails, consider Butazolidin alka. Giving one capsule four times a day often provides prompt, pain-relieving, anti-inflammatory action to help restore joint mobility. The results you can get within a week can be maintained on as little as one or two capsules daily.

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions. For full details, please read the prescribing information. It's summarized on the back of this page.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.



Fire fighter for arthritic flare-ups.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

Ragan, C.: The Clinical Picture of Rheumatoid Arthritis, in Arthritis, ed. 8, edited by J. L. Hollander and D. J. McCarty, Jr., Philadelphia, Lea & Febiger, 1972, chap. 21, p. 335.

Geigy

Important Note This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients: avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Substitute alka capsules for tablets if dyspeptic symptoms occur. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia), dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.

Indications Rheumatoid arthritis, osteoarthritis, bursitis, acute gouty arthritis and rheumatoid spondylitis.

Contraindications Children 14 years or less, senile patients, history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia, history or presence of drug allergy, blood dyscrasias, renal, hepatic or cardiac dysfunction, hypertension, thyroid disease, systemic edema, stomatitis and salivary gland enlargement due to the drug; polymyalgia rheumatica and temporal arteritis patients receiving other potent chemotherapeutic agents or long-term anticoagulant therapy.

Warnings Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea, and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions The following should be accomplished at regular intervals. Careful detailed history for disease being treated and detection of earliest signs of adverse reactions, complete physical examination including check of patient's weight, complete weekly (especially for the aging) or an every two week blood check, pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

Adverse Reactions This is a potent drug, its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy, CNS reactions associated with overdosage, including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia, ulcerative stomatitis, salivary gland enlargement.

(B)98-146-070-J (10/71)

For complete details, including dosage, please see full prescribing information

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Pitfalls In The Diagnosis And Treatment Of Gynecologic Cancer

Hugh M. Shingleton, M.D.*

Introduction

Gynecologic cancers, especially those involving the cervix, uterus and ovaries, are not uncommon problems for Alabama women. The American Cancer Society estimates that this year a thousand women in the state will be discovered to have cancer involving the uterus (endometrium or cervix). Approximately 200 women will be found to have cancer of the ovary.

In the most recent years for which accurate statistics are available for comparison with other states in the nation (1969), these three types of gynecologic cancers were responsible for the deaths of 421 women in the State (Table 1). Nationally in 1969, 6,420 deaths occurred from cancer of the cervix, 5,535 deaths were caused by cancer of the uterus other than cervix and 9,788 deaths were caused by cancer of the ovary.

The economic, social, racial and other characteristics that predispose women to cancer of the cervix are especially prominent in this state and account for the disturbing fact that in 1969 Alabama continued to lead the nation in death rates from this type cancer with a figure of 11 deaths per 100,000 female population.

The purpose of this paper is to discuss problems in cancer detection and cancer treatment; to recommend ways of improving care; to present accurate survival figures for the three major gynecologic cancers by state and to present current staging information for those physicians who may not have this information readily available.

TABLE I

Alabama Deaths From Common Gynecologic Cancers (1969)

Cancer of Cervix	198*
Cancer of Ovary	132
Cancer of Uterus	91
	421

* *Highest Death Rate in Country—11 out of 100,000 women.*

Problems in Cancer Detection

Table II lists a number of problems that contribute to our poor showing nationally in regard to gynecologic cancer. While most doctors' offices and a few health departments offer some cancer detection clinics or examinations, the majority of the women in this state do not receive annual cancer detection checkups, and especially in relation to cancer of the cervix, the women at most risk are the ones least likely to receive examinations in physicians' offices. This is in some measure due to shortage of medical manpower and in many instances is due to ignorance on the part of the patients or failure of patients to take advantage of opportunities that do exist.

TABLE II

Problems In Cancer Detection

1. Inadequate facilities and personnel to provide routine cancer detection examinations for all women.
2. Delay in performing appropriate diagnostic examinations and biopsies, even in high risk and symptomatic patients
3. Pathology problems:
   Inaccuracies of cytology screening
   Missed diagnoses on biopsies or surgical specimens
   Communication problems between pathologists and clinicians

On the other hand, the only densely populated counties with ongoing cancer detection clinics available to the indigent population are Jefferson and Mobile. Limited facilities are available in certain other counties and the Alabama State Health Department is currently upgrading and starting new detection clinics in a number of counties. We have a long way to go, however. Estimates for the year 1973 show that only 11 per cent of the women in the state received pap smears!

We as physicians fail to take the opportunity to perform examinations to detect cancer in the course of our busy practices. With a medical manpower shortage, doctors are reduced to practicing crisis medicine and often do not have time to perform routine examinations. Women who appear at doctors' offices even with symptoms such as postmenopausal bleeding or spotting or with histories suggesting or compatible with malignancies may not receive appropriate examinations.

It is not uncommon to see patients referred for therapy of cancer of the endometrium or cervix who have been symptomatic for months and who may have seen one or two physicians who treated them symptomatically without examinations, smears or biopsies to establish a diagnosis of cancer. Patients may be seen and followed closely for months or years with a disease process such as diabetes, yet the physician following this process may fail to perform breast or pelvic examinations and may overlook developing malignancies.

Pathology problems contribute to delays in cancer detection. Even if pap smears were available to all the population at risk, in general use there is a 10 – 15 per cent false negative rate for one smear. If one had the time to

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identify and screen out high risk groups for cervix cancer, one would be wise to have two smears at three to six month intervals in such patients; based on *two* negative smears, one would have reasonable assurance the patient does not have a precursor of cancer or a cancer. It is not uncommon, however, to see patients with invasive cancer who have had one or more smears that are negative and this represents a cell sampling not representative of the lesion, necrosis or inflammation overlying a malignancy, or an undercalled pap smear. Certainly cervical (pap smear) cytology is not appropriate for screening for endometrial cancer, which as noted above kills almost as many women nationally as does cancer of the cervix.

Women who are at high risk for this lesion (strong family history, diabetes, hypertension and obesity, postmenopausal bleeding, etc.) require some tissue or cell sampling from inside the uterus, whether this be by curettage, endometrial biopsy, aspiration smears from the endocervix after sounding the uterus, or by one of the newer sampling devices such as the Gravlee jet washer or the vibra aspirator.

Pathologists, like clinicians, occasionally make errors in diagnoses, even if given adequate samples. The rarer the lesion the more likely an error is to occur. Rare ovarian tumors, complex endometrial hyperplasias and carcinomas, and trophoblastic disease are not often seen by an individual pathologist. This may lead to an erroneous diagnosis. This may then lead to inappropriate action by the clinician–especially if compounded by poor communication between the pathologist and clinician.

A small, inadequate biopsy may be reported as not definitely showing cancer but the pathologist may fail to convey that it is an inadequate biopsy that requires repeat for confirmation; the clinician may then act on a "negative" diagnosis. When the pathologist is not forewarned that cancer may be present, he may process an operative specimen (such as a hysterectomy) in a routine manner such that few sections are taken and a focus of invasive cancer missed. A too common example of this situation is a patient seen a year or two following a hysterectomy (done for either benign indications or "carcinoma in situ") who is found now to have invasive cancer in the vagina or pelvis.

Adenocarcinoma in the uterus does not necessarily mean adenocarcinoma of the uterus. Not uncommonly, ovarian cancers involve the uterus and the experienced, alert pathologist should convey this possibility to the clinician if the histologic specimen raises this possibility. It is important, since the treatment is entirely different.

Communication problems between pathologists and clinicians are magnified when their dialogue consists of exchange of requested reports. A surgeon who treats cancer dealing strictly with pathology reports will make errors simply because it is often difficult for a pathologist to convey exactly his concerns or the exact situation with the patient in relation to biopsies and surgical specimens and to convey his recommendations without oral communication. This speaks against "mail order" pathology too often used in practice.

Problems In Cancer Treatment

Table III lists four common problems encountered in patients with gynecologic cancer referred to the University of Alabama Medical Center. Patients still are subjected to hysterectomy for prolapse or fibroids in the presence of invasive cervical cancer. In some instances, false negative smears were involved; in others, smears or even pelvic exams were not performed prior to the hysterectomy. This is tragic for the patient since her chances of survival from cancer are usually diminished by such a conservative operation when a radical cancer operation or irradiation is indicated.

Another common problem in dealing with ovarian cancer which often presents with abdominal spread involving the omentum, bowel and the pelvic organs (stage III) is unaggressive surgery. Many surgeons will open the abdomen, take a biopsy and make little or no attempt to remove the bulk of the tumor. Moden chemotherapy and radiation can extend the life of patients even with such advanced cancer, but they are more likely to be effective if the bulk of the tumor is significantly reduced.

A not uncommon chain of events is for a patient to have a laparotomy with only a biopsy and after referral to the Medical Center, a re-operation is performed and much (or in rare circumstances all the tumor) is removed. Even if most of the tumor is removed, if any residual is present, radiotherapy, chemotherapy or both are indicated in the adjunctive treatment of patients with epithelial tumors.

In certain of the rare nonepithelial tumors of the ovary, these modalities may be used even if no tumor is left, due to the poor prognosis. Too often these facts are not appreciated by the primary physician and the patient may receive nothing for a number of months until major or massive recurrence is present.

A very common error associated with endometrial cancer is failure to properly stage the patient. Detection efforts for this type cancer are poor and the cancer is usually symptomatic before it is either detected or treated. If the cancer involves both the endometrial cavity and the endocervix, it is stage II disease and the five-year survival rate is approximately 47 per cent as compared to 70 per cent in stage I (endometrial cavity involvement only). (Table IV)

Perhaps the majority of doctors treating a patient with endometrial cancer fail to appreciate the necessity for this staging procedure which involves a fractional curettage, i.e. a separate curettage of the endometrial cavity and the endocervix. If endocervical involvement is present, the

TABLE III

Errors In Cancer Treatment

1. Simple hysterectomy in the presence of invasive cervix cancer.
2. Unaggressive surgery and omission of adjunctive therapy for ovarian cancer.
3. Undertreatment of endometrial cancer due to inadequate staging.
4. Radiation therapy using outmoded techniques or equipment; low dose therapy reducing complications (and cures); re-irradiation in radiation failures.

TABLE IV

Five-Year Survivals For Gynecologic Cancers*

	STAGE				
	I	II	III	IV	All
Cervix	77%	56%	32%	9%	52%
Endometrium	70%	47%	28%	5%	60%
Ovary	65%	25%	9%	1%	29%

*From FIGO (International Federation of Obstetrics & Gynecology 15th Annual Report 1973)

patient should be treated as though she has cervical cancer, i.e. either by irradiation alone or by a radical hysterectomy and node dissection, *not by a simple hysterectomy*. Too often the patient is treated the same ignoring one stage and this contributes to poor survival rates.

Radiation therapy can exact very good cure rates in cervical cancer and contribuutes to better survival rates in cancer of the endometrium and ovary. There is no modern place for the *250 KV x-ray machines* in treating gynecologic cancer. These machines are not capable of delivering tumoricidal dosages in most instances and have other drawbacks as well.

While qualified radiation therapists are scarce, more are being trained and in the future it should be mandatory that radiation therapy be given only by physicians with proper training in this specialty. Too often is the job relegated to a diagnostic radiologist who has little or no training in modern radiation therapy and this contributes to poor cure rates.

The radiation therapist, like the surgeon, must be aggressive in dealing with cancer and if he elects to give low doses simply to prevent complications, he will have less complications but more deaths from cancer.

Another common error in radiation of cancer is re-irradiation in patients who have recurrent or persistent tumor. Generally speaking, tumoricidal dosages properly given at the first treatment are given to tolerance for the adjacent organs, such as the bladder, rectum, ureters, small bowel, etc. It is therefore not appropriate in such patients to re-irradiate. This generally leads only to complications and does not help arrest the tumor.

Table IV lists five-year survival for the three common gynecologic cancers. If encountered in the early stages, survival is good. Overall survival for cancer of the cervix and endometrium are better than 50 per cent and only in cancer of the ovary do we have a low overall survival rate. One of the reasons for poor survival figures in Alabama is the lateness in which these cancers are detected.

The most common stage of cancer of the ovary is stage III and this stage is still commonly seen in cancer of the cervix. Endometrial cancer may be confined to the endometrium but with poorly differentiated tumors and tumors deeply invading the myometrium the survival is poor. To some extent, endometrial cancer survival rates could definitely be improved by detecting lesions in precursor stages or at the earliest possible time, prior to symptoms.

TABLE V

Problems In Patient Followup

1. Failure to detect and treat recurrences
2. Failure to anticipate and treat therapy complications
3. Complacency regarding post-hysterectomy examinations

Problems In Patient Followup

In Alabama about 200 women a year die of cancer of the cervix. If these women had regular, careful followup examinations, appropriate biopsies and x-ray studies to detect early recurrence, many could be salvaged by operations such as pelvic exenteration. Women can survive this major surgey and can live productive lives for years with approximately 30-40 per cent five-year survival after the surgery. One would expect that at least half the women dying of cervical cancer a year might be exenteration candidates. As a matter of fact, however, only about 20-30 women a year are considered for this type of surgery at the UAB Medical Center, which implies that many women with resectable recurrences are given sedatives, pain killers and are allowed to die in their local communities without due consideration of this final chance at cure.

Pessimism on the part of physicians enters into the picture heavily at this point! If the doctor is pessimistic about the chances of cure, it is unlikely that he will refer the patient or go to great lengths to explore all avenues of treatment before "writing off" the patient. Some do this because of lack of knowledge about the modern surgical procedures which can salvage the patient, or due to their mistaken idea that this surgery is too multilative and the patients are better off left to die.

Many of these ideas date back twenty years to the time when this surgery was being developed and the mortality rates from the procedures approached the cure rates. With better blood banking, antibiotics and improvement in surgical techniques exenteration has become almost routine in major medical centers and can offer the patient a chance for productive life afterwards.

Independent of cure and again often due to lack of time on the part of the physicians, we fail to anticipate such problems as ureteral stenosis or obstruction secondary to treatment—either surgical radiotherapeutic—resulting in loss of kidneys, or chronic urinary tract problems; sexual dysfunction related to radiation damage to the vagina resulting in broken homes, etc., and radiation damage to bowel resulting in chronic gastrointestinal problems. Many of these things are correctable or at least can be helped with attention, treatment, and counseling.

Another common mistake is to assume that a woman who has had a hysterectomy doesn't need pap smears. Too often pap smears in this context are equated to pelvic examinations. One needs to look no further than the fact that more women die of cancer of the ovary than of cancer of the cervix to see that this is fallacious reasoning. All women should be encouraged to have annual examinations which should include examinations of the breasts, the

abdomen, and the pelvis to detect the various types of cancer common in females including and especially those of the breast, the G.I. tract and pelvis. Certainly one has no chance of picking up ovarian cancer early unless the patient has a pelvic examination. It is too late when the patient comes in after she has noted a swollen abdomen, ascites and an abdominal mass.

Recommendations For Improving Care

Continued education from medical school extending into the practice years is mandatory, and PSRO, recertification, etc., are moves in the right direction in this regard. Development of regional cancer detection and treatment centers in the state manned by trained local physicians who communiate well with the Comprehensive Cancer Center in Birmingham also will meet the needs of patients and physicians in those local areas.

Much of the cancer can be treated in local communities, but many should be referred at least to regional centers. The function of the Comprehensive Cancer Center should be to consult on cancer care, deliver complicated tumor therapy, provide quality postgraduate education and to train physicians to deliver care in local communities and regional centers.

Every county should have ongoing cancer detection clinics. Since it is unlikely that enough doctors will ever be available to perform such routine preventive medicine examinations for all women, strong consideration should be given to using paramedical personnel who are trained specifically to perform these examinations.

One move in this direction is the Ob-Gyn Nurse Practitioner Program at UAB, which now has 30 graduates working in 25 counties primarily in public health clinics. These trained nurses can examine the breasts, the abdomen, the pelvis, do smears and other detection examinations, and if any abnormality is noted, can refer the patient to the appropriate doctor in the local community. This extends the abilities of the local doctors to provide quality health care to patients in their vicinity. Nurse practitioners may become an integral part of office practice in time, and indeed a number of physicians in the state utilize such personnel now in their private offices.

Another way to increase cancer detection efforts in the state is to require that all women over the age of 20 admitted to a hospital for any reason have cancer detection examinations unless it is contraindicated medically, unless they have had these examinations by their local physicians within the last six months, or unless the patient refuses the examination. Such a law is in effect in Illinois and a similar law is in effect in New York. Certainly several hundred lives would be saved a year if cancer detection examinations were a part of routine hospital admissions.

At University Hospital in Birmingham, for example, it was found that only about 10 per cent of women admitted to the hospital last year had pap smears. To correct this poor record, a special Gynecologic Examination Room has now been established and physicians may perform such examinations on their patients in this room, or may request that a nurse practitioner supervised by the Department of Ob-Gyn perform the routine examinations.

Of course, if any abnormality is found by the nurse practitioner, the attending physician is notified immediately. University Hospital thus is taking the lead in a new program which will benefit women admitted to the hospital and hopefully will set an example for the other hospitals in the state.

Physicians in all communities should identify pathologists who meet their needs and who are available locally to discuss directly with them complicated problems. Pathologists have a great deal to contribute to the care of the cancer patient and indeed all care starts with the proper interpretation of the biopsy or cytologic material by the pathologist. Too often the pathologist is relegated to a backstage role and the clinicians do not directly communicate with him. This is a mistake and will lead to error.

The pathologist, on the other hand, should appreciate that rare and unusual lesions require consultation and in most instances this is done. Cancer care should be deliberate; in almost no circumstance is it necessary to proceed immediately to treat the patient—particularly if the diagnosis is in question. A few days to send the slides to local colleagues or to a national authority on that particular subject will be of benefit to the patient and will contribute to the continuing education of the pathologist involved.

TABLE VI

Recommendations For Improving Care

1. Continuing Education courses to acquaint physicians with all aspects of cancer care.
2. Expansion of cancer detection clinics and a requirement that hospitalized females have cancer detection examinations
3. Improved communication between pathologists and clinicians; pathology consultations when indicated
4. Use of MIST Line system for advice in cancer care; use of regional trophoblastic disease consultation and laboratory backup services; use of regional colposcopy consultation services

The MIST system in Alabama is a great boon to the cancer patient since local physicians may pick up a phone and discuss aspects of surgical, chemotherapeutic and radiotherapeutic treatment of cancer with a medical center faculty member. Over a period of time, this will contribute to better cancer care and indeed in this respect Alabama is ahead of much of the nation.

Other services such as trophoblastic disease consultation and HCG titers are available in the UAB Medical Center and can assist the local doctor in following and treating his patient with molar pregnancies. Patients with abnormal pap smears can be evaluated in local communities due to a regional network of clinics in various areas of the state. These instruments are now available or soon will be available in the following communities in Alabama: Florence, Huntsville, Decatur, Birmingham, Tuscaloosa, Opelika, Montgomery, Selma, Dothan and Mobile. Local physicians have been trained to use the instruments.

For the benefit of physicians who may wish current staging systems for the three major gynecologic cancers, the staging for cancer of the cervix, endometrium and ovary

follow. More complete information on staging as well as an excellent technical bulletin on the treatment of gynecologic cancer is available through the American College of Obstetrics and Gynecology, One East Wacker Drive, Chicago, Illinois 60601. Please ask for Bulletins No. 23 and 24, Classification and Staging of Malignant Tumors in the Female Pelvis and Treatment of Gynecologic Cancer respectively.

STAGING OF GYNECOLOGIC MALIGNANCIES

Carcinoma Of The Cervix Uteri

Preinvasive Carcinoma

Stage O. Carcinoma in situ, intraepithelial carcinoma.

Invasive Carcinoma

Stage I. Carcinoma strictly confined to the cervix (extension to the corpus should be disregarded).

Stage Ia. The cancer cannot be diagnosed by clinical examination; (1) early stromal invasion and (2) occult cancer.

Stage Ib. All other cases of Stage I.

Stage II. The carcinoma extends beyond the cervix but has not extended on to the pelvic wall. The carinoma involves the vagina, but not the lower third.

Stage IIa. No obvious parametrial involvement.

Stage IIb. Obvious parametrial involvement.

Stage III. The carcinoma has extended on to the pelvic wall. On rectal examination, there is no cancer-free space between the tumor and the pelvic wall. The tumor involves the lower third of the vagina.

Stage IIIa. No extension onto the pelvic wall.

Stage IIIb. Extension onto the pelvic wall.

Stage IV. The carcinoma has extended beyond the true pelvis or has involved the mucosa of the bladder or rectum. A bullous edema as such does not permit allotment of a case to Stage IV.

Carcinoma Of The Corpus Uteri

Stage O. Carcinoma in situ. Histologic findings suspicious of malignancy.

Stage I. The carcinoma is confined to the corpus.

Stage Ia. The length of the uterine cavity is 8 cm. or less.

Stage Ib. The length of the uterine cavity is more than 8 cm.

The Stage I cases should be subgrouped with regard to the histologic type of the adenocarcinoma as follows:

G1. Highly differentiated adenomatous carcinomas.

G2. Differentiated adenomatous carcinomas with partly solid areas.

G3. Predominantly solid or entirely undifferentiated carcinomas.

Stage II. The carcinoma has involved the corpus and the cervix.

Stage III. The carcinoma has extended outside the uterus but not outside the true pelvis.

Stage IV. The carcinoma has extended outside the true pelvis or has obviously involved the mucosa of the bladder or rectum. A bullous edema as such does not permit allotment of a case to Stage IV.

Carcinoma Of The Ovary

Clinical and Operative Staging

Stage I. Growth limited to the ovaries.

Stage Ia. Growth limited to one ovary; no ascites; (1) capsule ruptured, (2) capsule not ruptured.

Stage Ib. Growth limited to both ovaries; no ascites; (1) capsule ruptured, (2) capsule not ruptured.

Stage Ic. Growth limited to one or both ovaries; ascites present with malignant cells in the fluids; (1) capsule ruptured, (2) capsule not ruptured.

Stage II. Growth involving one or both ovaries with pelvic extension.

Stage IIa. Extension and/or metastases to the uterus and/or tubes and/or other overy.

Stage IIb. Extension to other pelvic tissues.

Stage III. Growth involving one or both ovaries with widespread intraperitioneal metastases.

Stage IV. Growth involving one or both ovaries with distant metastases.

Special category. Unexplored cases which are thought to be ovarian carcinoma.

Transactional Analysis For The Physician: Stroking Hunger And Time Structure

Taras J. Cerkevich, Ph.D.*

Third In A Series

Psychological Stroking

Transactional analysis (TA) recognizes that all organisms have a built-in, biological need for stimulation. Without the proper amount of stimulation, infant experimental organisms, such as rats, mice, monkeys, grow up sickly, underweight, more anxious and less intelligent than their well stimulated siblings. In extreme cases of stimulus deprivation, infant animal subjects will die.

The same situation applies to humans. Human infants need stimulation, especially the stimulation that occurs from interacting with others. Mothers satisfy their infants hunger for stimulation by rocking, tickling, feeding and touching them, decorating their beds with mobiles, singing to them and the like.

TA recognizes three types of stimulation: 1.) Positive stimulation better known as "strokes". Strokes make people feel good. They convey the message, "You're OK" to the recipient and they help people grow in positive directions. 2.) Negative stimulation better known as "discounts." Discounts make people feel bad. They convey the message, "You're not OK" to the recipient and they make healthy psychological development difficult. 3.) Lack of stimulation better known as "neglects". Neglects give people no feeling and the message they convey is, "You do not exist". Although people naturally prefer strokes, people, especially young children, will settle for, and sometimes even provoke, discounts in order to avoid the monotony of neglects.

As a child grows, he develops an unstated agreement with his parents as to how strokes, discounts and neglects will be delivered. Discounts and neglects are usually freely delivered while strokes quite often have strings attached to them. Such an agreement is known as a "stroke economy". The word "economy" is used to emphasize the barter-like nature of this agreement.

The Psychological Effects of Stroke Economics

We can classify stroke economics into four major types:

1. Those in which neglects are most frequently given. In this situation, the individual grows up without learning how to feel. Intellectual and physical growth are stunted. Withdrawal, apathy and autism are frequent. A child raised in such an economy may grow up and earn a "schizophrenic" or "retarded" label.

2. Those in which discounts are most frequently given. Children raised in this economy often grow up to become unfeeling people who use the same tactics of psychological attack as their parents did.

3. Those in which discounts, neglects and strokes are all given in various proportions. The net result of this type of an economy is to produce an "at leaster"—a person who is not a loser, as in the two aforementioned economies, yet this individual is not a winner. Depending on the proportion of discounts, neglects and strokes, the individual will usually earn some type of "neurotic" label.

4. Those in which strokes are most frequently given. These economics are very rare. People who come from this type of an economy have been referred to by such terms as, "winners", "self-actualizers" and "well-adjusting."

The Need for Time Structure

People obtain and give strokes by acting within a psychosocial framework. If there is no communion with other people, then, it follows that there will be social stimulation and an individual will not receive strokes, discounts or neglects. Thus, people need to structure their time in order to obtain the strokes of other folks.

TA recognizes six major ways of structuring time:

1. Withdrawal. By withdrawing, an individual cuts himself off from the give and take of social stimulation of others. Although withdrawal, a learned response from childhood, may be a way to avoid unpleasant experiences, withdrawal also has it's healthy aspects as in the case of the individual who may find it necessary to withdraw in an Adult manner in order to evaluate and, subsequently, modify his or her behavior.

2. Rituals. A ritual is a simple, stereotyped transaction in which two or more people exchange complementary surface strokes. Examples of these types of behaviors are handshakes, greetings, pats on the back and the like. More complex rituals include that body of behavior encompassed by the so called "rules of etiquette." Rituals, then, are the oil of social behavior and save time.

3. Pastimes. Pastimes present people with an opportunity to spend time with another person in a pleasant manner without becoming deeply involved with each other. When people engage in pastimes, they talk about innocuous subjects such as "the weather", "the kids", "ain't it awful", sports, recipes, cars, politics, etc. Thus, pastimes permit people to feel each other out for more intimate types of relationships.

4. Activities. Activities are tasks that people want to do, need to do or have to do. Examples of activities include: washing the car, reading a book, building a house, taking a walk, preparing dinner, writing a report, etc. Two pastimes that are of particular importance for many people are "raising the kids" and "going to work". Some people

*Clinical Psychologist, Mobile.

devote their whole lives to one or both of these activities. They suddenly realize that when "the kids" are raised or when they no longer have to "go to work," their time is no longer structured and they may lose what strokes they have been receiving from these activities.

5. Games. Games can structure time from one minute to a life time. A game is a set of recurring, stereotyped transactions that are superficially legitimate but, in reality, contain concealed motivations. Through games, individuals attempt to advance their life programs (scripts) by proving the decisions they have made about themselves and about others.

6. Intimacy. Intimacy is beyond all the other forms of time structuring. In intimacy, people stop withdrawing, drop the superficial behavior of rituals and pastimes, set aside their games and feel a deep sense of oneness with each other. In intimacy, people become psychologically exposed to one another. Instead of knowing each other from one level of their personae—an image that an individual attempts to portray to other people—people begin to know each other as they really are.

The Nature of Transactions

People talk to each other, both verbally and non-verbally. People speak to each other while they perform rituals, engage in pastimes and activities, play games and enjoy intimacy. By portraying interpersonal behavior in terms of ego states, users of TA can diagram the transactions that occur between people. TA recognizes three major types of transactions: complementary, crossed and ulterior.

In complementary transactions, the lines of communication are open and parallel. The listener gives the natural and expected response to the speaker's stimulus. (Figures 1 and 1a) Notice that in each situation there is no tension between the speaker and listener. Open, direct and straightforward communication has occurred.

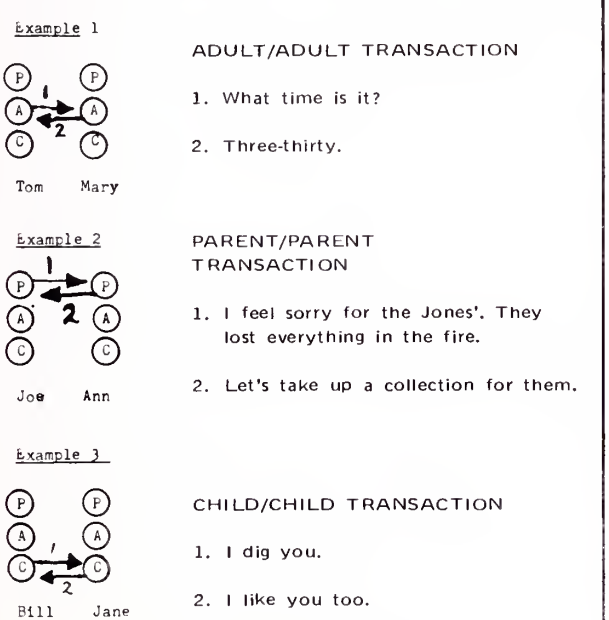


FIGURE 1
COMPLEMENTARY TRANSACTIONS. In complementary transactions, the lines of communications are open and parallel. The natural and expected response is given to a stimulus.

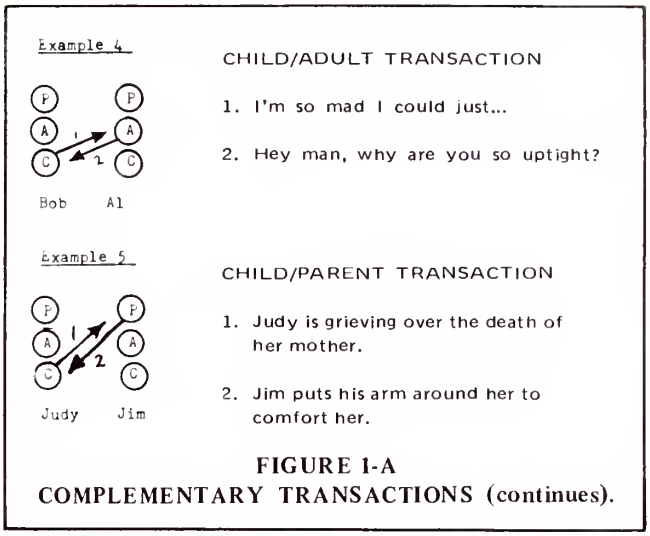


FIGURE 1-A
COMPLEMENTARY TRANSACTIONS (continues).

Crossed transactions, on the other hand, are characterized by tension. In a crossed transaction, the listener makes an unexpected response to a speaker's stimulus. The lines of communication are crossed and people are thrown psychologically off balance. (Figure 2.) Note the point of tension

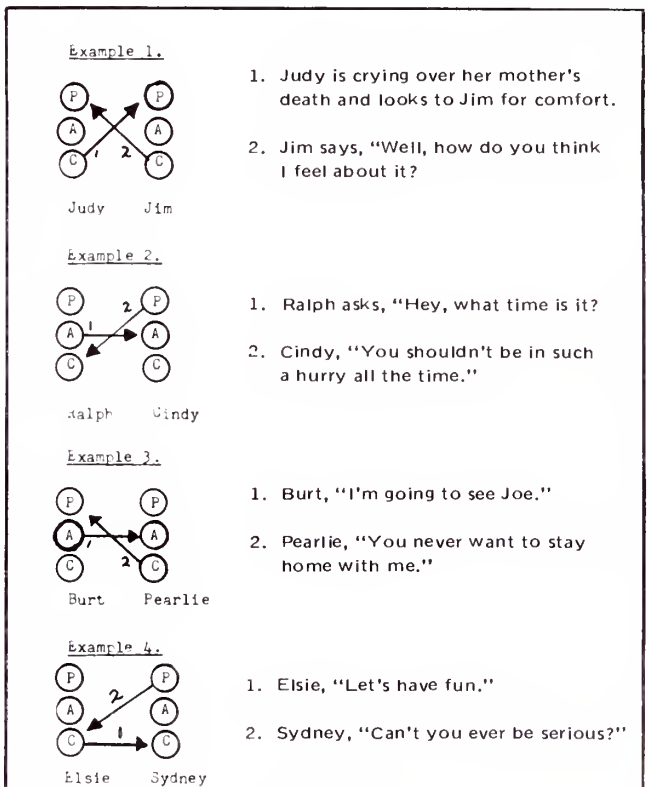


FIGURE 2
CROSSED TRANSACTIONS. Communication in crossed transactions is characterized by tension which occurs when an unexpected response occurs to a stimulus.

in each of the examples. The best way to handle these types of transactions is to point out that the listener had given an unexpected response and that the speaker feels uneasy about the listener's responses.

Finally, ulterior transactions involve more than one ego state. In ulterior transactions, the speaker sends the listener a stimulus that is superficially Adult to Adult but in reality, an ulterior message with concealed motivations is being sent from any of the speaker's three ego states to any one of the listener's three ego states. (Figure 3) The speaker's purpose often is to hook the listener into a position where game playing can begin. The listener is caught in a dilemma because either message that he responds to can get him into a game.

Figure 4 illustrates a dilemma that many physicians are often caught in. A woman brings her 9-year old son in. This is the fourth visit within the space of two months. Previous medical findings have been negative. Mother says, in a whining emotional tone of voice, "Dr. I just don't know what to do anymore. Johnny doesn't eat, he doesn't sleep, he complains about his stomach, he just doesn't do anything he should." The mother's message is illustrated in diagram (a) of Figure 4.

The mother's message is superficially Adult–she has stated some facts–but the whining emotional tone of voice indicates a Child message and the word "should" alerts the

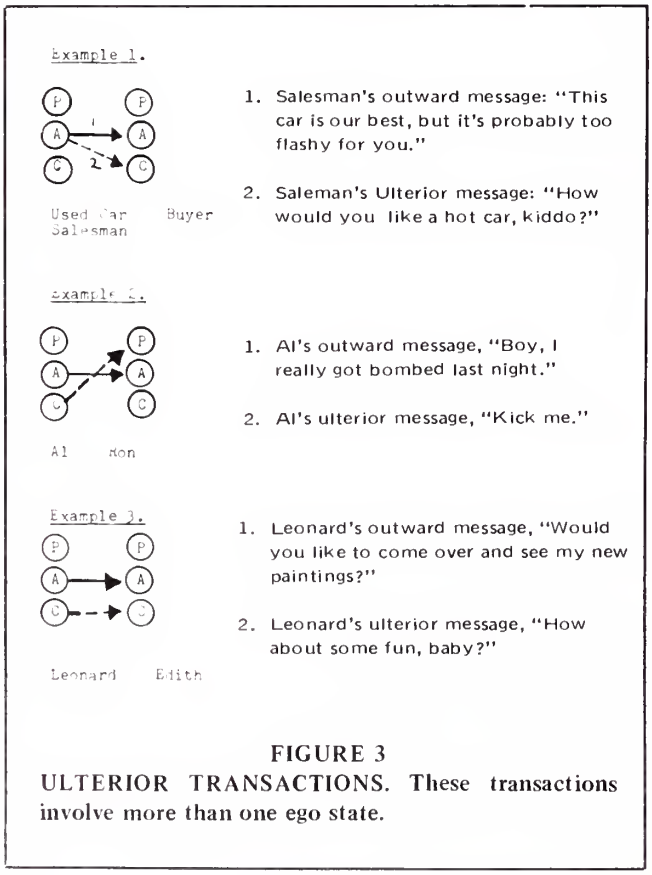


FIGURE 3
ULTERIOR TRANSACTIONS. These transactions involve more than one ego state.

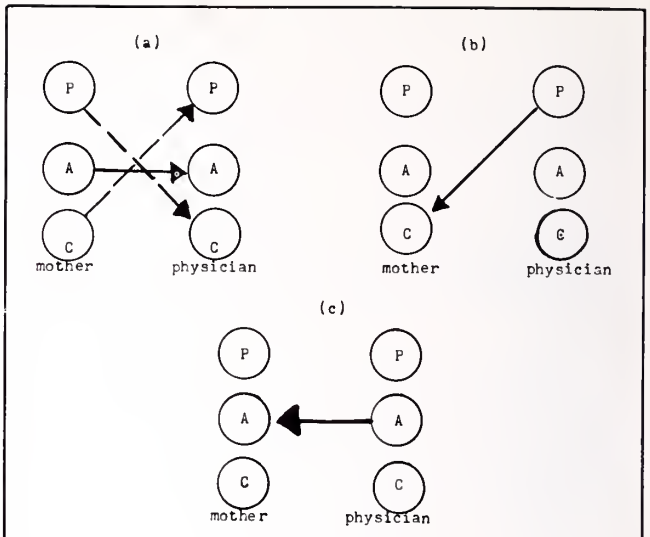


FIGURE 4
Using T.A. to deal with ulterior transactions. In (a) Mother gives the physician three messages. In (b) the physician responds to the mother's ulterior Child message and gives her the usual reassurance (stroke). In (c) the physician, using T.A. seek more Adult information from the mother, thereby increasing the effectiveness of the treatment. See text for further information & detail.

physician to a Parent message. The physician then performs whatever medical examination is required to check Johnny out. Again, the results are negative.

The physician who has not picked up on the mother's two ulterior messages will probably respond as in diagram (b) of Figure 4 and say, "Don't worry, Mrs. Jones, Johnny will be OK. You're doing a good job." Mother, who has grave doubts about her competence as a mother and a wife leaves reassured that she is a good mother only to return on another day.

Meanwhile, Johnny is learning a hypochondriacal life script–"I'm sick". On the other hand, the physician who uses TA, immediately picks up the two ulterior messages and stores them in his Adult memory bank for further reference. After performing the necessary medical examinations and receiving negative results, he may then say to the mother in an Adult manner as portrayed in diagram (c) of Figure 4. "Mrs. Jones, this is the fourth visit you've made to my office with Johnny in the past four months. Each time I've examined him, I've found negative results. Today, you sounded very distressed when you spoke about Johnny. I perceive that you may have some doubts as to your adequacy as a mother. Can we talk about it?" If the physician then learns that there are numerous family type problems, he or she can then refer to mother the appropriate sources.

In this article, strokes, time structuring and transactions were discussed. In the next article in this series, I will analyze psychological games in terms of ulterior and concealed motivations.

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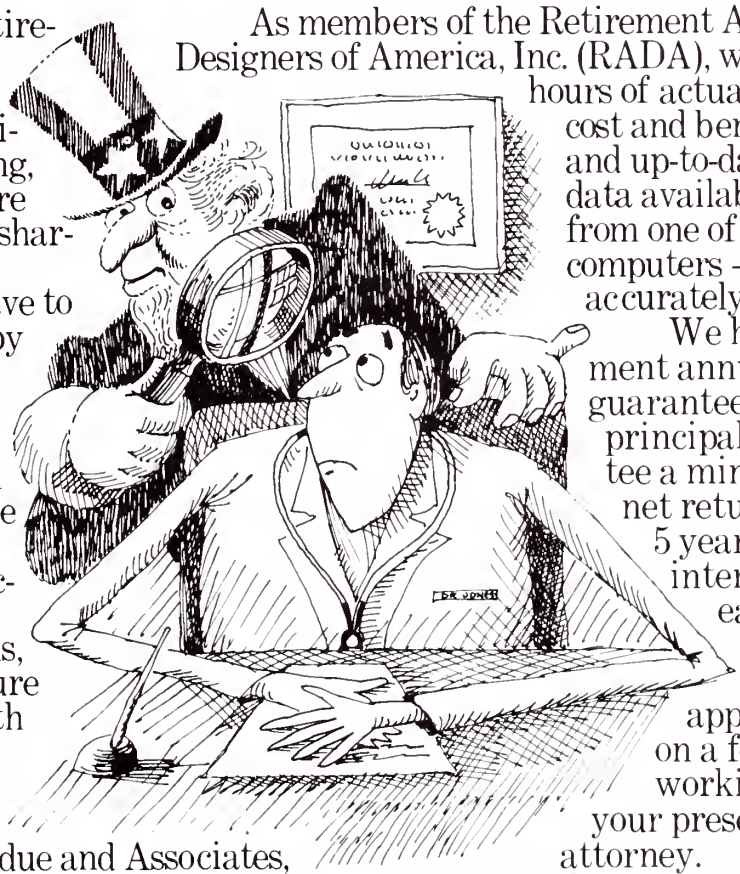
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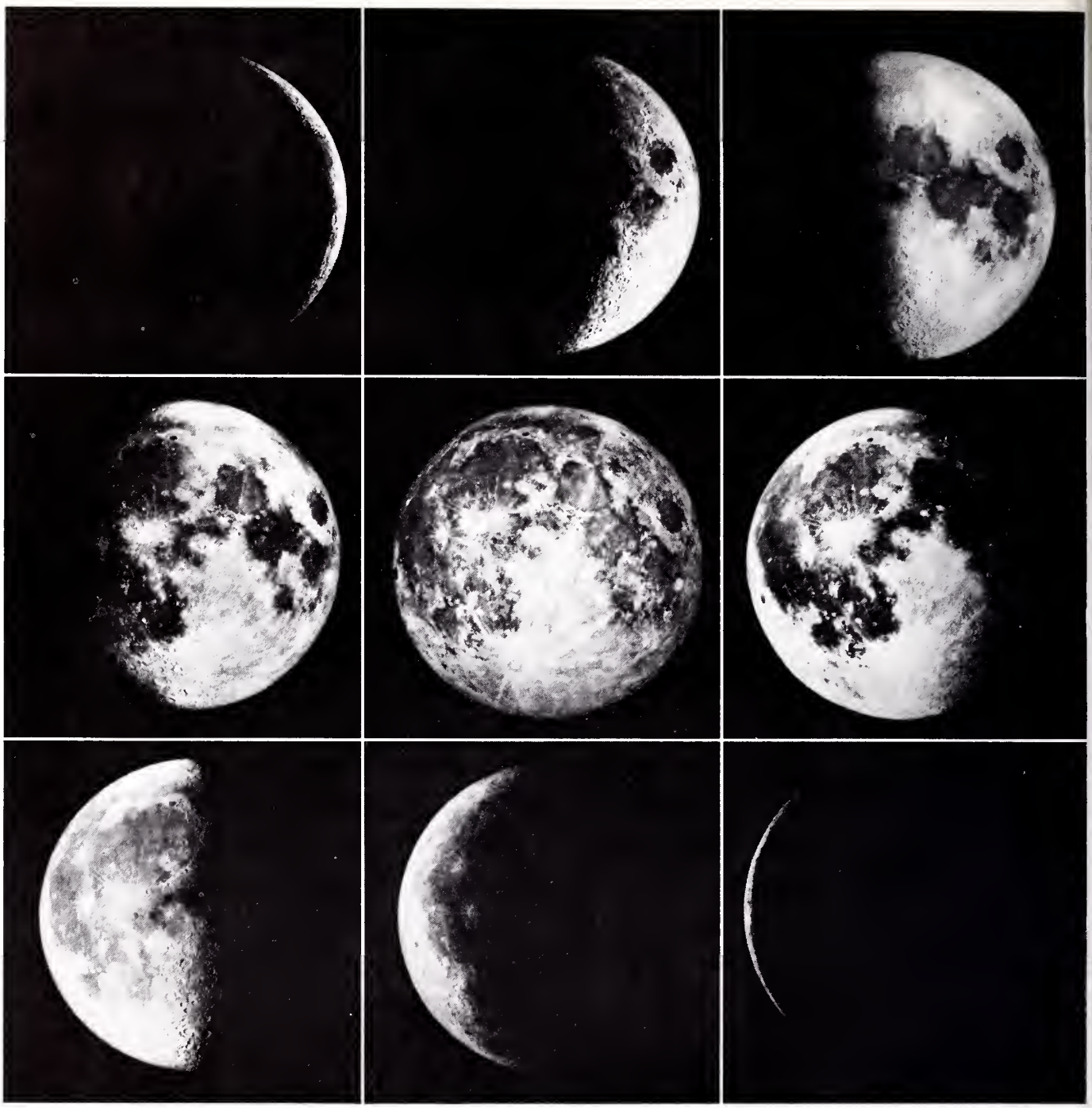
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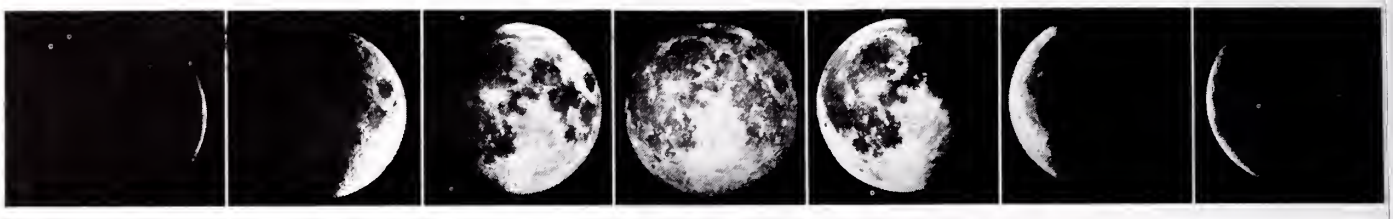
†Serious as well as minor conditions have been reported following the use of oral contraceptives. These conditions include thromboembolic disease. The physician should remain alert to the earliest manifestations of any symptoms of serious disease and discontinue oral contraceptive therapy when appropriate. The physician should be fully aware of the complete Prescribing Information for this product.

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In sequence...



Ortho-Novum SQ Tablets

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Description: ORTHO-NOVUM SQ Tablets provide a sequential oral contraceptive regimen consisting of white tablets containing only mestranol 0.08 mg, and blue tablets containing both mestranol 0.08 mg and norethindrone 2.0 mg

Action: Gonadotrophin suppression

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure and reduced tolerance to carbohydrates, have been reported and appropriate tests should be conducted to monitor these during oral contraceptive therapy. Liver disease has also been reported, and the physician should be alert to its earliest manifestations.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency for some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can neither be affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication: Contraception

Contraindications: 1. Thrombophlebitis, thromboembolic disorders, cerebral vascular disease, or a past history of these conditions. 2. Markedly impaired liver function. 3. Known or suspected carcinoma of the breast. 4. Known or suspected estrogen-dependent neoplasia. 5. Undiagnosed abnormal genital bleeding. 6. Known or suspected pregnancy.

Warnings: 1. The physician should be alert to the earliest manifestations of thrombotic and thromboembolic disorders, thrombophlebitis, cerebrovascular disorders including hemorrhage, pulmonary embolism and retinal thrombosis. Should any of these occur or be suspected, the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism and cerebral vascular disease, occlusive or hemorrhagic, and the use of oral contraceptives. There have been three principal studies in Great Britain[1-3] leading to these conclusions and three in this country.[4-7] The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while the United States studies found relative risks of 4.4 to 11, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as non-users.

In May, 1974, the Royal College of General Practitioners in England[8] issued an interim report of its continuing large-scale prospective study comparing a user group to a non-user group. This study in its interim analysis states: "A statistically significant higher rate of reporting of cerebrovascular accidents in Takers is evident, but the numbers are too small to justify an estimation of the degree of risk." The study also reported a higher incidence of superficial and deep vein thrombosis in users as compared to non-users. The risk of superficial and deep vein thrombosis was reported to be lower in women using 50 mcg estrogen preparations.

The Sartwell study[4] indicated that the risk did not persist after discontinuation of administration. Both the Sartwell and the Royal College studies indicated that the degree of risk was not associated with duration of treatment.

In a collaborative American study[5,6] of cerebrovascular disorders in women with and without predisposing causes, it was estimated that the relative risk of thrombotic stroke was 4.1 to 9.5 times greater in users than in non-users. A comparable estimate for hemorrhagic stroke was 2.0.

None of the American studies was designed to evaluate a difference between products. However, the Sartwell study[4] suggested that there might be an increased risk of thromboembolic disease in users of sequential products.

Other retrospective studies[9,10] have reported an increased risk of post-surgery thromboembolic complications in oral contraceptive users. It has been recommended that therapy be discontinued at least one month prior to elective surgery.

2. Discontinue oral contraceptive medication if there is a gradual or sudden partial or complete loss of vision, proptosis or diplopia; onset or aggravation of migraine or development of headache of a new pattern which is recurrent, persistent or severe, papilledema, or any evidence of retinal vascular lesions.

3. Fetal abnormalities have been reported to occur in the offspring of women who have taken progestogens and/or estrogens during pregnancy.[11,12] The safety of ORTHO-NOVUM SQ in pregnancy has not been demonstrated. Pregnancy should be ruled out before initiating or continuing the contraceptive regimen. Pregnancy should always be considered if withdrawal bleeding does not occur.

4. A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

5. Hepatic lesions (adenomas, hepatomas, hamartomas, regenerating nodules, etc.), occasionally fatal, have been reported in women on oral contraceptives. Such lesions may present as an abdominal mass or with the signs and symptoms of an acute abdomen. These lesions should be considered if the patient has abdominal pain or evidence of intra-abdominal bleeding. This has been reported in short-term as well as long-term users of oral contraceptives.

Precautions: 1. A thorough history and physical examination should be performed before prescribing oral contraceptives and periodically during their administration and should include special reference to breasts and pelvic organs, including Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. 2. Endocrine and possibly liver function tests may be affected by treatment with ORTHO-NOVUM SQ. Therefore, if such tests are abnormal in a patient taking ORTHO-NOVUM SQ, it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen-progestogen preparations, pre-existing uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam, adequate diagnostic measures are indicated. 6. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 7. Any possible influence of prolonged ORTHO-NOVUM SQ therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 8. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving ORTHO-NOVUM SQ therapy. 9. The age of the patient constitutes no absolute limiting factor, although treatment with ORTHO-NOVUM SQ may mask the onset of the climacteric. 10. The pathologist should be advised of ORTHO-NOVUM SQ therapy when relevant specimens are submitted. 11. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids. 12. Cholestatic jaundice has been reported in users of oral contraceptives. If this occurs, ORTHO-NOVUM SQ should be discontinued. This condition is more likely to occur in patients who have experienced cholestatic jaundice of pregnancy. Patients with a history of cholestatic jaundice of pregnancy should be carefully observed during ORTHO-NOVUM SQ therapy.

Adverse reactions observed in patients receiving oral contraceptives: A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism, cerebral thrombosis and hemorrhage, gallbladder disease.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis, hepatic lesions with or without intra-abdominal bleeding.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, which may persist, cholestatic jaundice, migraine, rash (allergic), mental depression, change in weight (increase or decrease), breast changes (tenderness, enlargement and secretion), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post-partum, rise in blood pressure in susceptible individuals.

Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post-treatment, which tends to occur more frequently in women with a history of menstrual disorders, premenstrual-like syndrome; changes in libido, changes in appetite, cystitis-like syndrome, headache, intolerance to contact lenses, nervousness, dizziness, fatigue; backache, hirsutism, loss of scalp hair; erythema multiforme, erythema nodosum, hemorrhagic eruptions; itching; vaginitis.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function—increased sulfobromophthalein retention and other tests; coagulation tests—increase in prothrombin, Factors VII, VIII, IX and X; decrease in anti-thrombin III; increase in platelet aggregability; thyroid function—increase in PBI, and butanol-extractable protein-bound iodine and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.

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The MUDRANES

Discreet formulations of four well regarded drugs for the relief of bronchial distress—Potassium Iodide, Glyceryl Guaiacolate, Aminophylline, Ephedrine with Phenobarbital (to lessen cardiac stimulation).



INDICATIONS: For the prompt symptomatic relief of bronchial asthma, emphysema and bronchiectasis. The Mudranes dilate the bronchi and liquefy mucus plugs. DOSAGE: Tablet; One tablet with a full glass of water 3 or 4 times daily as required. Divide tablet for child's dose. Elixir; Children, 1 cc for each 10 lbs. of body weight. May be repeated 3 or 4 times a day. Adult, one tablespoonful 4 times daily. All doses should be followed with a glass of water.

CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

HOW SUPPLIED: Mudrane and Mudrane GG available in bottles of 100 and 1000 tablets; Mudrane-2 and Mudrane GG-2 in 100s; Elixir in pints and half-gallons.

Federal law prohibits dispensing without prescription.

WILLIAM P. POYTHRESS & COMPANY, INC., RICHMOND, VIRGINIA 23261

the sun and solar keratosis...

Over-exposed



and often underdiagnosed

Solar keratosis is not an uncommon medical problem.

Of course, the prevalence of keratotic lesions is greater in locations south of the 38th parallel—the so-called "Solar Keratosis Belt"—receiving the greatest amounts of solar radiation. However, solar keratosis can occur among any light-skinned population, usually in persons over 40, wherever people are subject to extended exposure to the sun.

Solar keratoses are generally not difficult to identify.

These skin lesions are usually multiple, flat or slightly elevated, brownish or red in color, papular, dry, rough, adherent and sharply defined. They are found on areas of the skin having extensive exposure to sunlight. Clinical characteristics of the lesions, their predominant location on exposed surfaces, the age of the patient and his skin type are important considerations in the diagnosis.

Solar keratoses can, and should, be treated because they are potentially premalignant.

Chronic exposure to sunlight frequently leads to degenerative changes in the skin. This can often result in the development of multiple, potentially premalignant keratotic lesions. Therefore, early detection and treatment is advisable.

Treatment with Efudex (fluorouracil) provides a high degree of effectiveness with a low recurrence rate, ease and convenience of therapy, low incidence of scarring, excellent cosmetic results in most cases, and a high level of patient acceptability.

Efudex® 5% Cream
fluorouracil/Roche®

Because there may be more than meets the eye.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris (hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

Cream, 25-Gm tubes—containing 5% fluorouracil in a vanishing cream base consisting of white petrolatum, stearyl alcohol, propylene glycol, polysorbate 60 and parabens (methyl and propyl).

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

Case history for patient photographed at left on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

Around The State

Roster Supplement

NEW MEMBERS

DALE COUNTY

ROLLINS, Raleigh Willis, b 42, mc Univ. Ga. 69, recip Ga. 71, 18 Castleway, Fort Rucker. 36360. U.

ELMORE COUNTY

GORBEA, Ricardo Laffitte, b 05, mc New York 32, recip. N.Y. 34, Tallassee 36078. Ob-Gyn.

RUDELL, Jeffery Holmes, b 40, mc Univ. Louisville 67, recip NBME 68, 102 Freeman Street, East Tallassee. 36078. FP-I.

HOUSTON COUNTY

BRANNAN, John Phillip, Jr., b 44, mc Univ. Ala 70, recip NBME 71, 702 Crimson Court, Dothan 36301. R.

BUCKNER, Michael Sterling, b 30, mc Johns Hopkins 55, recip. Ga. 55, Rt. 1, Headland 36345. Path.

JEFFERSON COUNTY

AUGUST, Phillip, Jr., b 48, mc Univ. Ala. 73, recip. NBME 74, 1615 25th Street, North, Birmingham. 35234.

BERNSTEIN, Michael Richard, b 47, mc Temple 74, recip NBME 75, Eye Foundation Hospital, 1720 8th Avenue, South, Birmingham, 35233. Opht.

BLACK, Joseph William, b 33, mc Bowman Gray 59, recip. N.C. 59, Medical Laboratory Association, 1025 South 18th Street, Birmingham 35202. Path.

DALE, Richard Charles, b 44, mc Univ. Ala. 70, recip. NBME 71, 1500 6th Avenue, South, Birmingham. 35205. I.

EISENHART, George Van, b 39, mc Univ. Neb. 63, recip Neb. 73, 800 Montclair Road, Birmingham. 35213. Path.

GAMS, Richard A., b 35, mc Univ. New York 60, recip NBME 61, 1919 7th Avenue, South, Birmingham. 35205. I.

GOLDSTEIN, Allan Robert, b 39, mc Ohio State 65, recip. Ohio 65, 1500 6th Avenue, South, Birmingha. 35205. I.

GOULD, John Samuel, b 39, mc Univ. Vermont 64, recip. NBME 65, 619 South 19th Street, Birmingham. 35294. S.

HOSFORD, James Michael, b 43, mc Georgia 72, recip. NBME 73, 3401 Montgomery Highway, Birmingham. 35209. Pd.

KEPPLER, Clarence Burton. b 29, mc Loma Linda Univ. 65, recip. NBME 66, Lloyd Noland Hospital, Fairfield 35064. FP.

KIM, Robert (Yoon), b 42, mc Yonsei Univ. 66, recip. Ga. 73, 619 South 19th Street, Birmingham 35233. R.

KIM, Sooil, b 40. mc Seoul Natl. 65, recip. Ga. 74, Lloyd Noland Hospital, Fairfield. 35064. I.

LLOYD, Lewis Keith, Jr., b 41, mc Tulane 66, recip. La. 66, UAB Medical Station, UAB Station, Birmingham. 35294. U.

MOON, James Owen, b 44, mc Univ. Ala. 70, recip. NBME 71, Lloyd Noland Hospital Fairfield. 35064. U.

MOYO, Edwin Mapendla, b 41 mc Howard 71, recip. Ga. 75, 1915 19th Street, Ensley. 35218. I.

PARDUE, William Otis, Jr., b 20, mc Univ. Pa. 44, recip. Pa. 45, Lloyd Noland Hospital, Fairfield. 35064. C.-I.

PEINHARDT, William Frederick, b 46, mc Univ. Ala. 73, recip. NBME 74, Carraway Hospital, Birmingham. 35234. I.

PRESSGROVE, Lewis Wayne, b 43, mc Univ. Tenn. 68, recip. Tenn. 68, 1515 6th Avenue, South, Birmingham. 35233. I.

TORO-LEYTON, Claudio Eraemo, b 39, mc Univ. Chile 64, recip. Wash. D.C. 75, University Hospital, UAB-University Station, Birmingham. 35294. P.

TRAUGH, George Holton, b 28, mc Va. 59, recip. W. Va. 60, 1717 6th Avenue, South, Birmingham. 35294. GP.

WEBSTER, Edward William, b 43, mc Howard 71, recip. Maryland 73, 1915 19th St., Ensley. 35218. I.

WILLIAMS, Donald Bryant, b 43, mc Univ. Ala. 69, recip. NBME 75, 1717 11th Ave., South, Birmingham. 35205. R.

MADISON COUNTY

BRALLEY, Ernest Meade, Jr., b 20, mc Baylor 44, recip. Texas 44, 410 Lowell Drive., Huntsville Clinic, Huntsville. 35801. I.

BURNSIDE, Richard Carlton, b 41, mc Univ. Colorado 67, recip. Colorado 68, 204 Lowe Ave., Huntsville. 35801. Or.

BURSON, Robert Allan, b 43, mc Univ. Tenn. 67, recip. Tenn. 68, 201 Governors Drive, Huntsville. 35801. I.

CALE, Robert Torrance, Jr., (Terry), b 48, mc Univ. Ala. 74, recip. Ga. 75, 1500 Sparkman Drive, Apt. 2-J, Huntsville. 35810. FP.

CANALE, Daniel Doyle, Jr., b 45, mc Vanderbilt 71, recip. NBME 72, 805 Madison Street, Huntsville. 35801. Path.

COLEMAN, William Hardin, b 40, mc Univ. Ala. 74, recip. NBME 75, 7305 Statton Drive, Huntsville 35801. FP.

DiPLACIDO, Bruce Michael, b 4, mc Univ. Ala. 69, recip. NBME 70, 930 Franklin Street, Huntsville. 35801. I.

McDONALD, Clyde Colvin, b 34, mc Univ. Ala. 58, sb 59, 600 St. Clair Ave., Suite 11, Huntsville. 35801. S.

MONTGOMERY, John Richard, b 34, mc Univ. Ala. 58, sb 59, 811 Tanahill Dr., Huntsville. 35802. Pd.

TIETKE, Wilhelm, b 38, mc Univ. Gottingen 68, recip. Mich. 73, 600 St. Clair Avenue, Huntsville. 35801. I-GE.

WONG, Peter, b 44, mc Institute of Med., Ragoon, Burma 68, Limited Lic. 75,-201 Governors Drive, Huntsville. 35801. Pd.

MOBILE COUNTY

HUDDLE, Robert Michael, b 40, mc Univ. Tenn. 66, recip. Tenn. 67, 1653 Springhill Ave., Mobile. 36604. I.

ST. CLAIR COUNTY

LEMAK, Lawrence John, b 43, mc Univ. Ala. 69, recip. NBME 70, P. O. Box 688, Pell City, 35125. S.

MEMBERS DECEASED

BLOUNT COUNTY

Olive V. Hendrix, M.D., Oneonta . . . . Deceased 8/28/75

JEFFERSON COUNTY

Robert E. Cloud, M.D., Helena . . . . . Deceased 8/75

TUSCALOOSA COUNTY

James S. Snow, M.D., Tuscaloosa . . . . Deceased 9/3/75

NOTICE OF RESIGNATION

AUTAUGA COUNTY
GRUBBS, Roy James: No longer Secretary-Treasurer of Autauga County.
PERRY COUNTY
LONG, John Reed: No longer Secretary-Treasurer of Perry County.

CHANGE OF OFFICE

ELMORE COUNTY
New Secretary-Treasurer: Omer L. Burnett, Jr., M.D., Community Hospital, Inc., East Tallassee. 36023.

MEMBERS REINSTATED

JEFFERSON COUNTY
JOHNSTON, Flemon Carden, Jr., b 36, mc Univ. Ala. 61, sb 62, 3208 Karl Daley Rd., Birmingham. 35218. Pd.
PITTS, Robert Marshall, b 26, mc Vanderbilt 52, sb 54, 924 S. 18th St., Birmingham. 35205. PdS.
POLT, Sarah Stephens, b 26, mc Woman's Penna. 57, recip. Ohio 65, 619 South 19th Street, Birmingham. 35233. Path.
WEIL, Warren Burke, b 23, mc Harvard 49, sb 54, 800 Montclair Road, Suite 517, Professional Building, Birmingham. 35213. I.
MADISON COUNTY
DUNCAN, Thomas Clyde, b 41, mc Univ. Tenn. 66, recip. Tenn. 71, 410 Lowell Drive, Huntsville 35801. GP.
CARTER, William Wood, b 21, mc St. Louis Univ. 45, recip. Missouri 61, 821 Gallatin Street, Huntsville. 35801. U.

ADDRESS CHANGES

AUTAUGA COUNTY
GRUBBS, Roy J., Jr., present Prattville to Sylacauga.
EMORE COUNTY
HALL, Dennis E., present Tallassee to 204 Medical Office Park, Talladega 35160.
HOUSTON COUNTY
HAUGHTON, L. Davis, Jr., present Dothan to P. O. Box 1846, Dothan 36301.
JACKSON COUNTY
BRITT, Darryl B., present Scottsboro to No. 311 Parks Ave., Scottsboro 35768.
LeQUIRE, Donald L., present Scottsboro to P. O. Box 42, Scottsboro 35768.
JEFFERSON COUNTY
BARTHOLD, David R., present Birmingham to 908 Medical Center Drive, Bessemer 35020.
CANNON, Harold E., present Birmingham to 7833 2nd Ave., South, Birmingham 35206.
COLLINS, Chalmers D., present Birmingham to 303 Devon Drive, Birmingham 35209.
DATNOW, Boris, present Birmingham to 1908 14th Avenue, South, Birmingham, 35205.
FAULKNER, James S., present Birmingham to 7833 2nd Ave., South, Birmingham 35206.
HOLLAND, Claude M., Jr., present Birmingham to 2660 10th Ave., South, Suite 305, Birmingham 35205.
MORASKI, Roger E., present Birmingham to Professional Office Bldg., 800 Montclair Road, Birmingham 35213.
MORRIS, John B., present Birmingham to 7833 2nd Ave., South, Birmingham 35206.
NUCKOLS, Joseph F., present Birmingham to 6900 6th Ave., Birmingham 35212.
PALACIOS, Esteban J., present Birmingham to 1995 Pepperell Parkway, Opelika 36801.
PAYNE, John H., III, present Montgomery to Lloyd Noland Hospital, Fairfield 35064.
REEDER, James L., present Birmingham to 3919 Montclair Road, Suite 104, Birmingham 35213.
SAVAGE, Perry L., present Birmingham to 7833 2nd Ave., South, Birmingham 35206.
SLAPPEY, Donald H., present Birmingham to 7833 2nd Ave., South, Birmingham 35206.
STAATS, Okey J., present Birmingham to Baptist Medical Center – Princeton Pathology Dept., 701 Princeton Ave., Birmingham 35211.
STRAUGHN, John M., present Birmingham to 2000-C Brookwood Medical Center Dr., Birmingham 35209.
LAUDERDALE COUNTY
HUNTER, James W., Jr., present Florence to P. O. Box 1928, Decatur 35601.
MACON COUNTY
STORY, Robert H., present Tuskegee to 10 Rush Drive, Tusekegee 36083.
MOBILE COUNTY
WALKER, Rhett P., present Mobile to P. O. Box 242 Montrose 36559.
PERRY COUNTY
LONG, John R., present Marion to 1707 Greenwood Circle, Demopolis 36732.
PIKE COUNTY
COLLEY, James O., Jr., present Troy to 707 George Wallace Drive., Troy, 36081.
RUSSELL COUNTY
STRICKLAND, W. Edward, present Phenix City to 1120 Morningside Drive, Perry, Georgia 31069.
TUSCALOOSA COUNTY
DAVIS, Jerry A., present Tuscaloosa to 535 River Road, East, Riverside Medical Center, Suite A-2, Tuscaloosa 35401.
WALKER COUNTY
RAY, Robert E., present Jasper to 1105 7th Ave., North, Jasper 35501.

NEW TELEPHONE NUMBERS

AUGUST, Philip, Jr., Jefferson 254-6000
BARTHOLD, David R., Jefferson 428-9318
BERNSTEIN, Michael, Jefferson 933-8251
BLACK, Joseph W., Jefferson 933-8221
CANNON, Harold E., Jefferson 933-8221
DALE, richard C., Jefferson 933-7083
DATNOW, Boris, Jefferson 933-9426
EISENHART, George V., Jefferson 591-4000
FAULKNER, James S., Jefferson 591-8100
GAMS, Richard A., Jefferson 934-3690
GEGAN, Edward L., Sumter 652-2691
GOLDSTEIN, Allan R., Jefferson 933-7081
GOULD, John S., Jefferson 934-4667

HALE, Ernest E., Jr., Tuscaloosa 345-7351
HOLMAN, Norman W., Dale 774-5262
HOSFORD, James M., Jefferson 870-1273
HUNT, Horace C., Sumter 652-2616
HUNTER, James W., Jr., Lauderdale 355-5315
JOHNSTON, F. Carden, Jefferson 934-3574
KEPPLER, Clarence B., Jefferson 785-2121
KIM, Robert (Yoon), Jefferson 934-5670
LEMAK, Lawrence J., St. Clair 338-2219
LLOYD, Lewis K., Jefferson 934-4932
LUTHER, Abner L., Marshall 878-6078
MOON, James O., Jefferson 785-2121
MORASKI, Roger E., Jefferson 591-2706
MORRIS, John B., Jefferson 591-8100
MOYO, Edwin M., Jefferson 785-3101
PARDUE, William O., Jr., Jefferson 785-2121
PAYNE, John H., III, Jefferson 785-2121
PEINHARDT, William F., Jefferson 254-6000
POLT, Sarah S., Jefferson 933-9211
PRESSGROVE, Lewis W., Jefferson 933-9211
SAVAGE, Perry L., Jefferson 591-8100
SLAPPEY, Donald H., Jefferson 591-8100
STRAUGHN, John M., Jefferson 879-1666
TORO-LEYTON, Claudio E., Jefferson 934-5164
TRAUGH, George H., Jefferson 934-4131
WEATHERS, Bobby W., Cullman 739-0880
WEBSTER, Edward W., Jefferson 785-3101
WEIL, Warren B., Jefferson 591-2167
WILLIAMS, Donald B., Jefferson 933-8122



Would you help this kid?

When the dam broke at Buffalo Creek, a lot of people weren't as lucky as Jamie Mosley.

His family made it up the hill just in time. Seconds later, a wall of water swept everything away.

Here's Jamie in the Red Cross Shelter, thinking it all over. One look at that face, and we're awfully glad we were there to help.

Every year, Red Cross touches the lives of millions of Americans. With support. With comfort. With a helping hand when they need it.

So when you open your heart, with your time or your money, you can be certain it's in the right place.

Red Cross. The Good Neighbor.

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NECROLOGY



James S. Snow, M.D.
1909-1975

Dr. James Searcy Snow, Tuscaloosa dermatologist, died September 3 at the age of 66.

A native of Tuscaloosa, he received his degree in medicine from the University of Colorado and began private practice in Birmingham in 1940. During World War II, Dr. Snow served as chief of dermatology at Gorgas Hospital in the Canal Zone. He returned to private practice in Tuscaloosa in 1946.

As a charter member of the Alabama Dermatology Society, Dr. Snow served two terms as president. Survivors include his wife and three sons.

Clive Vernon Hendrix, M.D.

1900 - 1975

Dr. Clive Vernon Hendrix, 75, retired Oneonta physician, died August 28, 1975, after a prolonged illness.

He was a native of Tennessee and graduated from the University of Tennessee in 1927. He had practiced in Oneonta for 26 years and had served as a member of the staff at Blount Memorial Hospital. Having served terms as president and secretary of the Blount County Medical Society, Dr. Hendrix was also a member of MASA and the Southern Medical Association.

Survivors include his wife and a daughter.

Federal Tax Dates

NOVEMBER

9. Semi-monthly excise taxes deposit due (IRS Form 504). (See January 9).

10. Quarterly return (IRS Form 941) due on Withheld Income and Social Security Taxes. (Return is due on this date if taxpayer elected to deposit taxes for last month in quarter). (See October 31).

10. Quarterly Excise Tax return due (IRS Form 720). (Return is due on this day if taxpayer elected to deposit taxes for last month in quarter. (See October 31).

15. Quarterly return of Gift Tax and payment of tax due. (IRS Form 709).

24. Semi-monthly excise taxes deposit due (IRS Form 504). (See January 9).

30. Monthly Excise Taxes deposit due (IRS Form 504).



Physician Placement Service In Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

General Practice: (Family Practice) Age 38; University of Nebraska 1966; seeking associate or group practice. Available January 1976. LW-1/1

General Practice: Age 46; Syracuse New York 1955; National Board; seeking group or institutional practice in town less than 20,000. Available September or October 1975. LW-1/2

Internal Medicine-Pediatrics: Age 28; University of Alabama 1973; National Board; interested in town greater than 10,000 population. Available July 1976. LW-4/2

Internal Medicine: Age 27, Louisiana State University 1974; seeking assistant or associate practice. Available July 1977. LW-4/1

Internal Medicine: Age 33; Georgia 1973; Board eligible; seeking group practice in a college town. Available June 1976. LW-2.

Internal Medicine: Age 31; Vanderbilt 1970; National Board; seeking assistant or associate practice. Available August 1975. LW-2/1.

Ophthalmology: Age 28, University of Alabama in Birmingham 1974; Available 1978. LW-10

Ophthalmology: Age 28, Tulane University 1971; Board eligible; seeking solo, associate or group practice. Available July 7, 1976. LW-10/2

Ophthalmology: Age 28; Emory University 1973; seeking solo, associate or group practice. Available July 1977. LW-10/3.

Orthopedics: Age 32; University of Tennessee 1969; Board eligible; seeking solo, associate, group, industrial or institutional practice; Available January 1976. LW-11

Orthopedics: Age 29; State University of New York at Buffalo 1972; Board eligible; seeking associate practice. Available July 1976. LW-11/1

Pediatrics: Age 27; University of Alabama 1973; seeking group practice. Available July 1976. LW-7/1

Pediatrics: Age 31; University of Alabama 1970; National Board; Board eligible; seeking associate or group practice. Available August 1976. LW-7

Pediatrics: Age 28, Temple University 1973; National Board; seeking group practice. Available September 1976. LW-3.

Surgery: Age 32; University of Illinois 1969; Board certified; National Board; seeking solo, associate or group practice. Available August 1976. LW-8.

Surgery: Age 30; University of Florida 1972; Board eligible; seeking solo or associate practice; Available July 1977. LW-8/3

Surgery-Thoracic & Cardiovascular: Age 35; Ohio State University 1966; Board certified; seeking associate or group practice. Available January 1976. LW-8/2

Urology: Age 32, University of Arkansas 1969; Board certified; Available July 1977. LW-9

PHYSICIANS WANTED

(Opportunities For Practice)

Emergency Physicians, P.A.—Group Practice Staffing Emergency Departments of several major Alabama hospitals. Positions immediately available due to expansion. 44 hour week plus benefits including Professional Liability Insurance; Continuing Education with Alabama Chapter ACEP; Vacation; more. PW-2/9.

Family Practice Physicians wanted in East Central Alabama City serving trade area of 40,000 population. Well equipped JCAH fully accredited 191-bed hospital and 52-bed skilled nursing home and fully accredited school of nursing. Location of area Mental Health-Mental Retardation Center. Fulltime radiology and pathology. Excellent opportunities in solo practice, partnership, or multispecialty clinic. Office space available for reasonable rental. Invitations to visit with expenses paid will be directed to those who qualify. PW-10

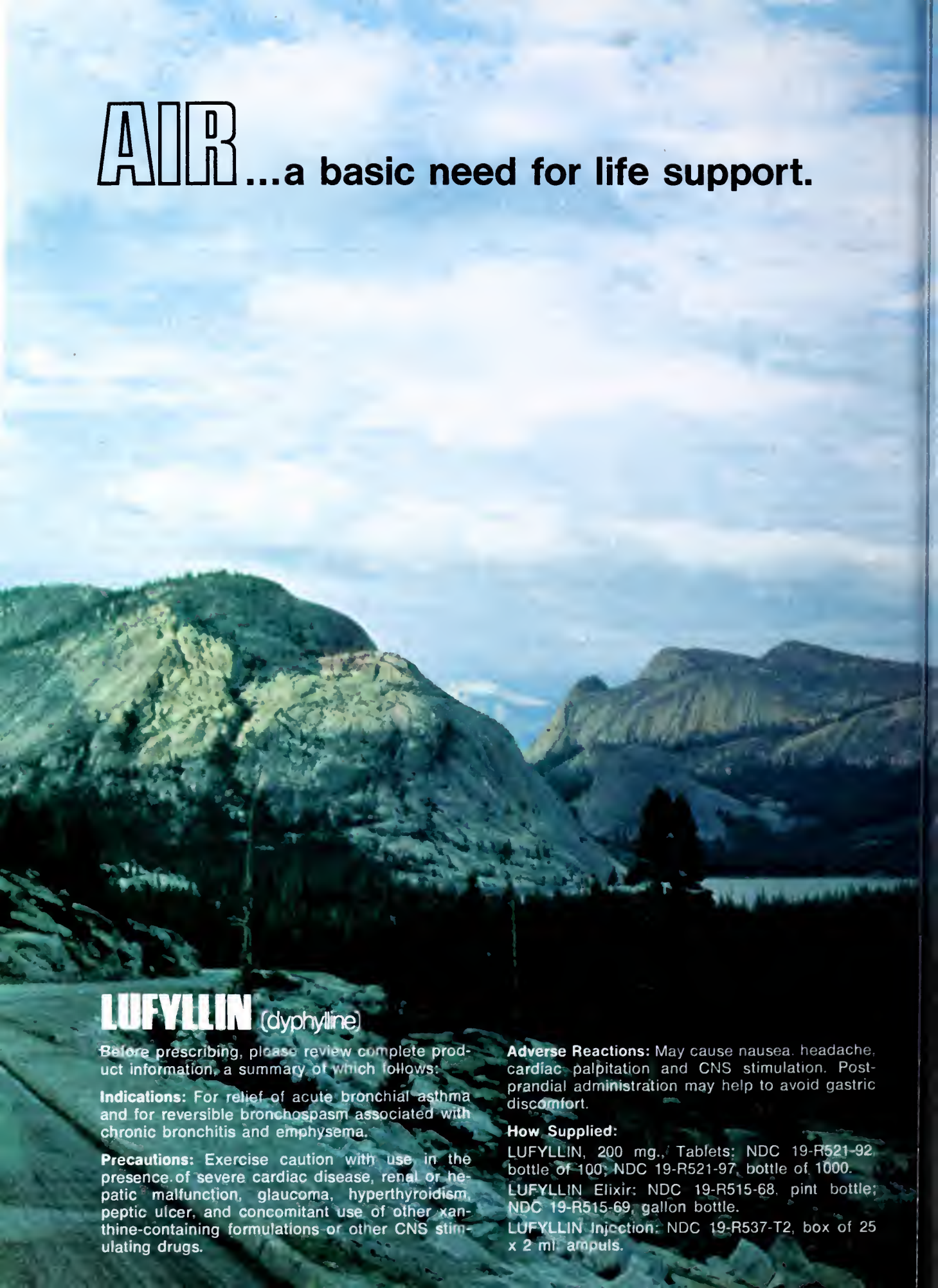
General Practitioner, Obstetrician-Gynecologist, Family Practitioner needed in progressive coastal community with trade area of 30,000 population. Two man practice located adjacent to an excellent 100-bed hospital. Medical school within 55 miles. Unlimited hunting, fishing, golf, tennis and water sports. PW-1

General Practitioner; associate wanted in a three physician general practice in a rural county near Mobile. Salary initially with anticipated early partnership arrangement. 30-bed county hospital adjoining the office. PW-1/5

General Practitioner: Opportunity in town of 3,000 population located in west Alabama in trade area of 20,000 population. 30-bed hospital in the town. Nearest large city 50 miles distant, population of 150,000. The Medical Clinic Board is authorized by the town to provide office space and arrange adequate housing. Farming and industry in the community. Churches, schools, and recreational activities. PW-1/8

Wanted—**2 General Practitioners, 1 Pediatrician** to locate in Central Alabama town with 17,000 population and a trade area of 35,000 population. Located near large city with specialty consultants available. Good 68 bed hospital with plans for a new 85 bed replacement hospital in the near future. Excellent fishing and camping, hunting, golf and schools. Excellent location to raise a family and practice medicine. Healthy stable economy. Minimum on call, none on weekends. Office suites available rent free for the first 12 months, also other financial assistance available; including moving expenses. Invitations to visit with expenses paid. PW—1/4

LOCUM TENENS, Wanted—Internal Medicine for busy practice—two weeks in March 1976. Salary negotiable. PW-2/7.



AIR...a basic need for life support.

LUFYLLIN (dyphylline)

Before prescribing, please review complete product information, a summary of which follows:

Indications: For relief of acute bronchial asthma and for reversible bronchospasm associated with chronic bronchitis and emphysema.

Precautions: Exercise caution with use in the presence of severe cardiac disease, renal or hepatic malfunction, glaucoma, hyperthyroidism, peptic ulcer, and concomitant use of other xanthine-containing formulations or other CNS stimulating drugs.

Adverse Reactions: May cause nausea, headache, cardiac palpitation and CNS stimulation. Postprandial administration may help to avoid gastric discomfort.

How Supplied:

LUFYLLIN, 200 mg., Tablets: NDC 19-R521-92, bottle of 100; NDC 19-R521-97, bottle of 1000.

LUFYLLIN Elixir: NDC 19-R515-68, pint bottle; NDC 19-R515-69, gallon bottle.

LUFYLLIN Injection: NDC 19-R537-T2, box of 25 x 2 ml. ampuls.

For relief of acute bronchial asthma and for reversible bronchospasm associated with chronic bronchitis and emphysema.

LUFYLLIN® (dyphylline)

...a basic need for the bronchospastic patient.

Tablets: 200 mg dyphylline
Elixir: per 15 ml: dyphylline 100 mg, alcohol 20% v/v

the bronchodilator with a difference...dyphylline.



A NEED FOR YOUR PATIENT BECAUSE.....

1. Proven efficacy
2. Little to no CNS stimulation
3. Little to no gastric upset
4. High therapeutic blood levels
5. Effective during long-term the
6. Only 1/5 the toxicity of theophylline or aminophylline (based on animal studies)

REFERENCES

1. Levine, E. R.: **Annals of Allergy** 23:403-413, September, 1965
2. Waxler, S. H. and Schack, J. A.: **JAMA** 143:736 (June) 1950
3. Brodwall, E. K.: **Acta Medica Scandinavica** 146:123, 1953
4. McColl, J. D., et al.: **J. Pharm. & Exp. Therp.** 116:343, 1956
5. Quevauviller, Par Andre, et al.: **Presse Med.** 61:1480-1482, 1953.
6. Maney, P. V., et al.: **J. Am. Pharm. Assoc.** 35:266-272, 1946

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Martha Hughes
President

Safety On The Streets —A Dream Or Reality?

The attempts on the life of President Gerald Ford in the past few weeks have again focused our attention and concern upon safety. "Let's Bring Back Safety on the Streets," the motto of the National Safety Council's Women's Crusade, is the theme of National S.O.S. Week, October 26–November 1, 1975. Our national auxiliary president, Mrs. Erle Wilkinson, is a member of the Executive Board of the Women's Conference and she has been asked to serve as chairman for this special observance.

The aim of the conference is to involve individual and group volunteers across the nation in action-oriented S.O.S. Week programs, elicit public understanding of and participation in the campaign and sharpen public awareness to the need of their support. If you would like to have a part in this much needed program, but you are not sure where to begin–follow these steps:

1. Get the facts on accidents and assaults from sources such as local officials, the media or local safety councils.
2. Find out what is being done about these problems in your area.
3. If others are working, join them in their program. If not, initiate action.
4. Choose participants for an S.O.S. core group. Enlist the aid of national and local safety councils.
5. Issue the call to a first meeting on S.O.S. You might ask an important local official to do this, lending his or her support to the program.
6. Share facts and knowledge at the meeting, bringing in resource people.
7. Evaluate skills of your participants and add personnel as needed.
8. Assign priorities. Choose specific areas on which to concentrate and decide the scope of your program.
9. Utilize press, radio and T.V. Involve them in your project from the beginning.

We believe that freedom from fear is a fundamental right of every human being. Because of our deep concern for the safety of every community, a national call for awareness is spotlighted October 26–November 1. However, in many communities it might take several weeks to set up your program. Do *not* decide *not* to participate–a week or two later is better than not at all.

Active women can make the difference–just through caring. Through this crusade we can protect ourselves, our loved ones and our neighbors. Change begins with caring enough. Anyone who is concerned about the problems of safety on the streets need not feel isolated or helpless. As an individual, she or he can initiate action, and start the momentum. It is lovely to dream, and dreams can come true–but this one needs some help. Will you do your part?

UAB Physicians Join MASA/Wausau Program

Faced with a September cancellation of insurance coverage by the St. Paul Insurance Company, full-time faculty members at UAB Medical Center joined the MASA/Employers' Insurance of Wausau medical liability program before the arrival of the September 30 deadline.

Approximately 274 physicians at UAB were listed on the initial insuring binder. The binder took effect as of September 30, with the one-year contract running until September 30, 1976.

At the same time, it was announced by UAB officials that house staff members would be insured by Wausau through the National Association of Residents and Interns (NARI) program.



The Montgomery County Medical Society, its Auxiliary, and the American Cancer Society are seeking to inform women of steps necessary in detecting possible breast cancer. Making plans for pamphlet distribution to area retailers are (l to r) Mrs. Felix Tankersley, Auxiliary member; Mr. James Cameron, Ed. Dir., American Cancer Unit; Mrs. Robert Combs, Auxiliary member; Mrs. William Hughes, Auxiliary Pres.; and Dr. Jackson Bostwick, Pres., Montgomery County Medical Society.

New Physicians Licensed To Practice In Alabama



Burson, Robert Allan, M.D., University of Tennessee College of Medicine, 1967, Reciprocity with Tennessee. Specialty: Internal Medicine.



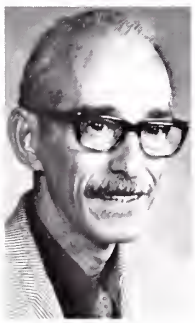
Armstrong, John Hale, M.D., University of Tennessee School of Medicine, 1974, Reciprocity with Tennessee (FLEX).



Black, Robert Lee, III, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Camm, Gertrude Elizabeth, M.D., University of Pennsylvania School of Medicine, 1968, Reciprocity with National Board of Medical Examiners. Specialty: Pediatrics.



Baez-Estevensasso, Albert, M.D., University of Puerto Rico School of Medicine, 1958, Reciprocity with Puerto Rico.



Bodie, Belin Frederick, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Coleman, William Hardin, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Bernstein, Michael Richard, M.D., Temple University Medical School, 1974, Reciprocity with National Board of Medical Examiners.



Bradshaw, Michael Thomas, M.D., St. Louis University School of Medicine, 1969, Reciprocity with Missouri. Specialty: General Surgery.



Cutter, Edward Parker, M.D., Harvard University School of Medicine, 1938, Reciprocity with Connecticut.



Black, Joseph William, M.D., Bowman Gray School of Medicine, 1959, Reciprocity with North Carolina.



Brockwell, Charles Phillip, M.D., University of Alabama School of Medicine, 1974, FLEX.



Fox, John Robert, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Gorbea, Ricardo Laffitte, M.D., New York Medical College, 1932, Reciprocity with New York. Specialty: Ob-Gyn.



Halla, James Thomas, M.D., University of Texas Medical Branch/Galveston, 1970, Reciprocity with Texas. Specialty: Internal Medicine.



Handal, Eduardo Jose, M.D., University of El Salvador School of Medicine, 1952, Reciprocity with Mississippi (FLEX). Specialty: Radiology.



Hobbs, Milton Dannelly, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Huie, Richard Thomas, M.D., University of Alabama School of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Karp, Robert Lawrence, M.D., University of Chicago Pritzker School of Medicine, 1970, Reciprocity with National Board of Medical Examiners.



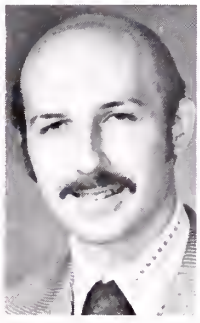
McCormack, Harold Arthur, M.D., University of Tennessee College of Medicine, 1962, Reciprocity with Tennessee.



Myers, Robert Patrick, M.D., University of Mississippi School of Medicine, 1960, Reciprocity with Mississippi.



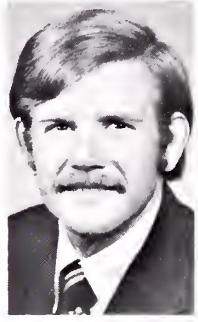
Parker, Joel Floyd, M.D., Medical College of Georgia, 1969, Reciprocity with Georgia. Specialty: Radiology.



Pritchett, Robert Moore, M.D., University of Alabama School of Medicine, 1971, Reciprocity with National Board of Medical Examiners.



Reynolds, Dwight Wells, M.D., University of Oklahoma College of Medicine, 1974, Reciprocity with National Board of Medical Examiners.



Robertson, Richard Hopper, M.D., Bowman Gray School of Medicine, 1974, Reciprocity with North Carolina (FLEX).



Rudell, Jeffrey Holmes, M.D., University of Louisville School of Medicine, 1967, Reciprocity with National Baord of Medical Examiners. Specialty: Internal Medicine.



Siebe, Jack Charles, M.D., Indiana University School of Medicine, 1956, Reciprocity with Indiana.



Smith, Jack Walter, M.D., Medical College of Georgia, 1953, Reciprocity with Georgia. Specialty: General Surgery.

Digest of Actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the October 15 meeting of the State Board of Censors:

- Approved Financial Statement for period ending September 30, 1975, showing receipts of $18,371.43 and disbursements of $39,097.59.
- Recommended that Mr. James Stallings, Director, Communications Dept., MASA, be designated to attend the Communications Workshop, New Orleans, December 1-3, 1975, sponsored by American Society of Association Executives.
- Received as information Quarterly Reports from the following Councils: Medical Service, Interspecialty, Medical Education, Public Affairs, Legislation and Socio-Economics.
- Recommended that inquiries by physicians for a relative value index be directed to the California Medical Association for a copy of the current California Relative Value Index until the Interspecialty Council completes its index update to fit Alabama needs.
- Recommended that the Education Director of MASA be a permanent member of MASA's cme accreditation survey teams as requested by the Council on Medical Education.
- Recommended that a study be made by the Education Department and the Council on Medical Education on public and patient education as it relates to audio-visual methods and merits.
- Approved allocation of up to $25,000 for expenditure by the Education Department for cme equipment and supplies.
- Received as information Final Health Legislation Status Report.
- Recommended that the State of Alabama House Joint Resolution No. 431, which endoreses a bid by the State of Alabama to be one of six states in a pilot program to study medical care in prisons, be passed on to the appropriate committee of the AMA.
- Recommended adoption of a resolution commending Mr. Richard Whitaker for his legislative work.
- Recommended that the Subcommittee be relieved of the responsibility of serving as a Grievance Committee and deferred action for one month on appointing a Grievance Committee pending further legal research.
- Recommended that at least once annually a Subcommittee of the Board of Censors volunteer to meet with the Executive Board of the State Pharmaceutical Association for a discussion of mutual problems.
- Approved reapportionment of MASA's House of Delegates according to the 1970 Federal census.
- Approved Blue Cross-Blue Shield rate adjustment increase for MASA group health insurance and approved increase from $10,000 to $250,000 of the Blue Cross-Blue Shield Major Medical program sponsored by MASA.

Allegations of Medicare Fraud:
June 1966 through December 1974

(All Providers under Parts A & B of Medicare)

Total Incidents Investigated for Possibility of Fraud 15,916

	Number	Per Cent
Total cases closed	13,410	100.0%
Total cases closed without referral to U.S. Attorney	13,139	98.0
Cases referred to U.S. Attorney for criminal prosecution	271	2.0
Action taken by U.S. Attorney:		
Conviction	117	0.8
Dismissal	14	0.1
Acquittal	15	0.1
Decline to prosecute	85	0.6
Indicted, pending trial	15	0.1
Decision pending by U.S. Attorney	53	0.3

Files Pending in SSA 2,506

NOTE: Cases processed by SSA are by numbers of "incidents" (or allegations of fraud), while those processed by the U.S. Attorney's office are by numbers of persons. The 271 "incident" files referred by SSA to the U.S. Attorney averaged 1.1 persons per file.

SOURCE: Social Security Administration, August 1, 1975.

Medicare Fraud Is Not Frequent

How widespread is Medicare fraud? Not very, as many may suspect!

Between June, 1966 and December, 1974, the Social Security Administration (SSA), completed investigations of 13,410 allegations that health care professionals and institutions had defrauded the Medicare program.

Only 217 of the cases—2.0 per cent of the total—were turned over to the Justice Department for criminal prosecution.

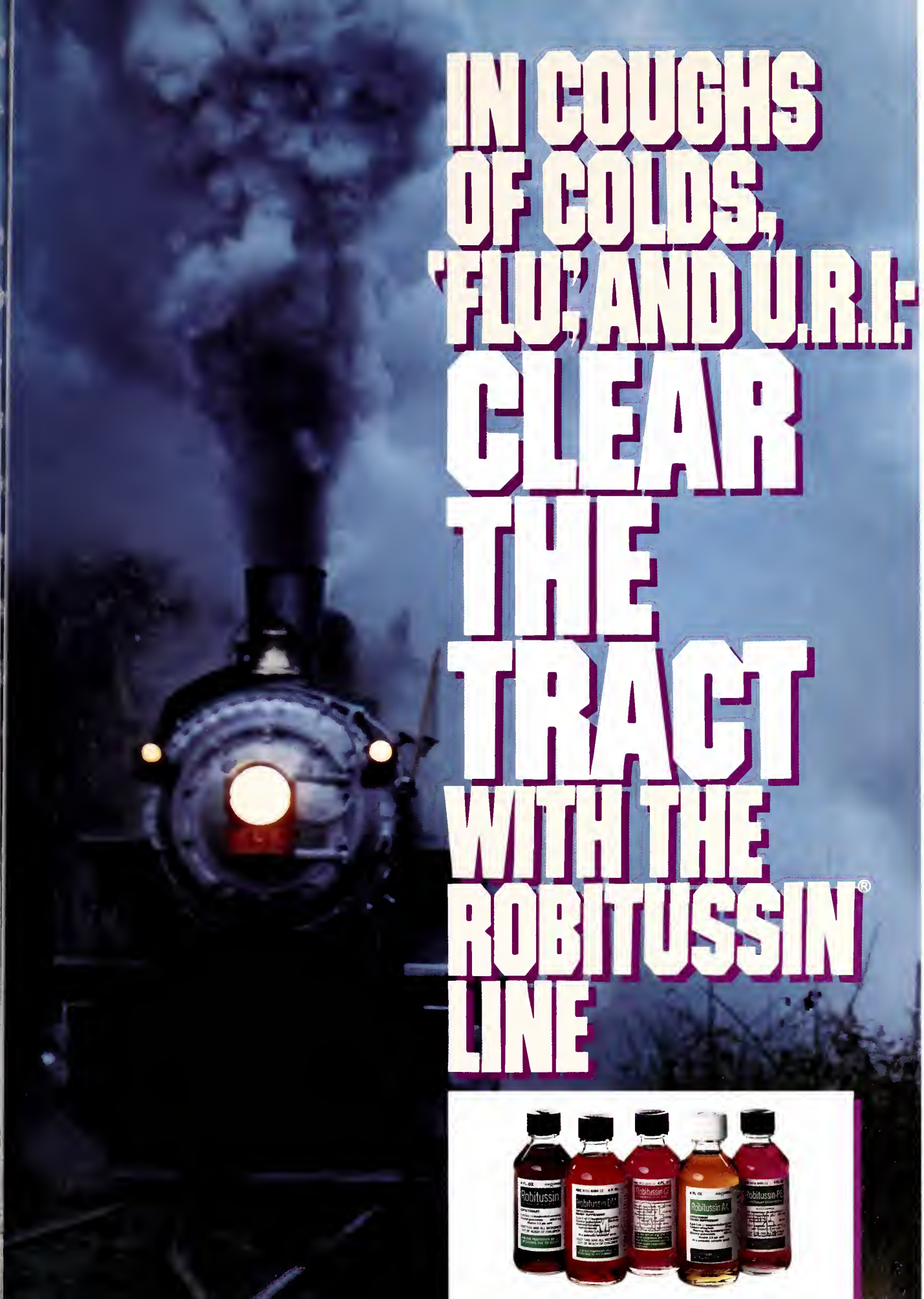
The report was based on data supplied by SSA, the government agency that administers the Medicare program. The 271 cases involved 299 individuals (1.1 defendants per case), the SSA data indicate.

Subsequently, 114 of the defendants were acquitted, their cases were dismissed, or the U.S. attorney declined to prosecute.

Convictions were obtained of 117 defendants—equal to fewer than 1 per cent of the Medicare fraud cases investigated by SSA over the 8½ year span.

CORRECTION

In the "Dean's Report" by G. Gayle Stephens, M.D., Dean of the UAH School of Primary Medical Care, in the September issue of the MASA Journal, surgery was omitted from the listing of clinical clerkships on page 54, fourth paragraph. The sentence in question should read "The medical student program provides clinical clerkships in Internal Medicine, Pediatrics, Obstetrics/Gynecology, Surgery, and Psychiatry."


IN COUGHS OF COLDS, 'FLU, AND U.R.I.-
CLEAR THE TRACT WITH THE ROBITUSSIN® LINE
Robitussin
Robitussin-DM
Robitussin-CF
Robitussin-AC
Robitussin-PE

"Kid, this stuff is the bananas."



Experts agree: when it comes to good-tasting banana flavor—without the unpleasant taste of paregoric—the makers of Donnagel®-PG really know their stuff!

For diarrhea

Donnagel-PG ℞

Donnagel with paregoric equivalent

Each 30 cc. contains:	
Kaolin	6.0 g.
Pectin	142.8 mg.
Hyoscyamine sulfate	0.1037 mg.
Atropine sulfate	0.0194 mg.
Hyoscine hydrobromide	0.0065 mg.
Powdered opium, USP (equivalent to paregoric 6 ml.) (warning: may be habit forming)	24.0 mg.
Sodium benzoate (preservative)	60.0 mg.

Alcohol, 5%

Now with child-proof closure

A·H·ROBINS

A.H. Robins Company
Richmond, Virginia 23220

THE 5 RELIABLE ROBITUSSINS can really help clear the respiratory tract. All contain guaifenesin,* the expectorant that works systemically to help stimulate the output of lower respiratory tract fluid. This enhanced flow of less viscid secretions promotes ciliary action and makes thick, inspissated mucus less viscid and easier to raise.

*formerly named Glyceryl Guaiacolate

For productive and unproductive coughs

ROBITUSSIN®

Each 5 ml teaspoonful contains:

Guaifenesin, NF	100 mg
Alcohol, 3.5%	

For severe coughs

ROBITUSSIN A-C® Ⓥ

Each 5 ml teaspoonful contains:

Guaifenesin, NF	100 mg
Codeine Phosphate, USP	10.0 mg
(warning: may be habit forming)	
Alcohol, 3.5%	

Non narcotic for 6-8-hr. cough control

ROBITUSSIN-DM®

Each 5 ml teaspoonful contains:

Guaifenesin, NF	100 mg
Dextromethorphan Hydrobromide, NF	15 mg
Alcohol, 1.4%	

Decongests nasal passages and sinus openings as it helps relieve coughs

ROBITUSSIN-PE®

Each 5 ml teaspoonful contains:

Guaifenesin, NF	100 mg
Pseudoephedrine** Hydrochloride, NF	30 mg
Alcohol, 1.4%	
**Formerly contained Phenylephrine Hydrochloride	10 mg

Decongestant action helps control cough and clear stuffy nose and sinuses. Non narcotic.

ROBITUSSIN-CF®

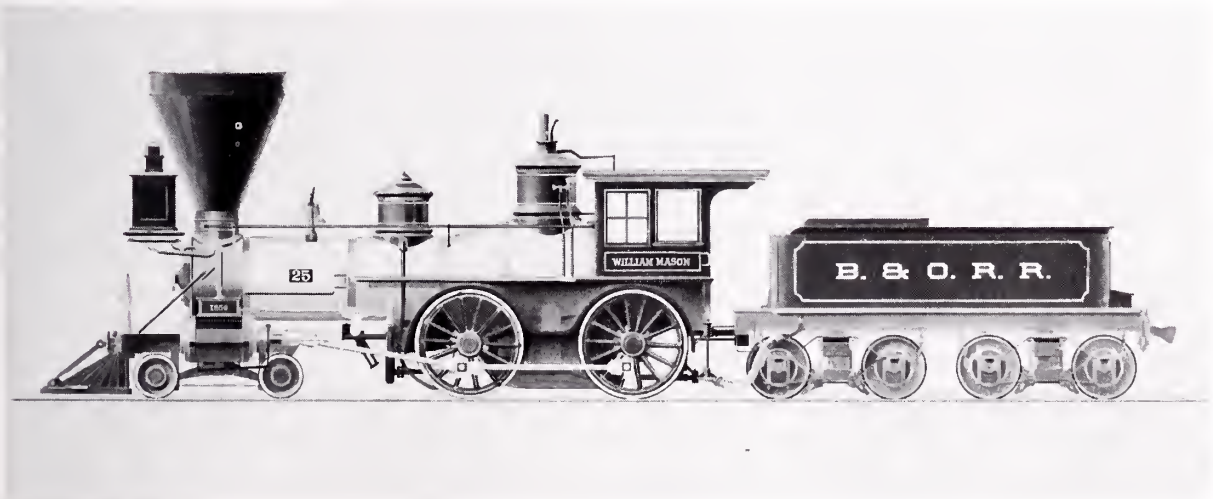
Each 5 ml teaspoonful contains:

Guaifenesin, NF	50 mg
Phenylpropanolamine Hydrochloride, NF	12.5 mg
Dextromethorphan Hydrobromide, NF	10 mg
Alcohol, 1.4%	

All Robitussin formulations available on your Rx or Recommendation.

A. H. Robins Company, Richmond, Va. 23220 A·H·ROBINS

For many years Robins has spotlighted the expectorant action of the Robitussin cough formulations by featuring action photographs of steam engines. In keeping with this tradition, the company recently commissioned a well-known illustrator to render full-color drawings of several classic locomotives... accurate to the minutest detail. The first of the series is now available. To order your print suitable for framing, write "Robitussin Clear-Tract Engine #1" on your Rx pad and mail to "Vintage Locomotives," Dept. T4, A. H. Robins Company, 1407 Cummings Drive, Richmond, Va. 23220.



The William Mason (1856)

There's something special about children vomiti

The risk of dehydration . . . plus the psychologica
stress on both mother and child . . .
greatly increases the urgency in controlling vomi
in children. In addition, there is, of course, need t
avoid the extrapyramidal problems associated wi
phenothiazine medications.



'hat's why special medication is preferred

ANS® CHILDREN SUPPRETTES™ are specially mulated to stop vomiting and nausea in children—idly and with minimal complications.

WANS are administered rectally—often the best te in the vomiting patient.

The exclusive WANS formula provides both ilamine maleate and sodium pentobarbital for ectiveness . . . contains no phenothiazines or local esthetics.

The unique Supprette delivery system rapidly eases effective levels of medication . . . with no s or fatty acids to affect absorption or cause local tation.

WANS SUPPRETTES require no refrigeration . . . lubrication other than water . . . and dissolve npletely, with virtually no leakage.

d for children over 12 years of age and adults fering from nausea and vomiting, consider higher-ength WANS® No. 1 or WANS® No. 2.

A special favorite* of Alabama physicians in controlling childhood vomiting

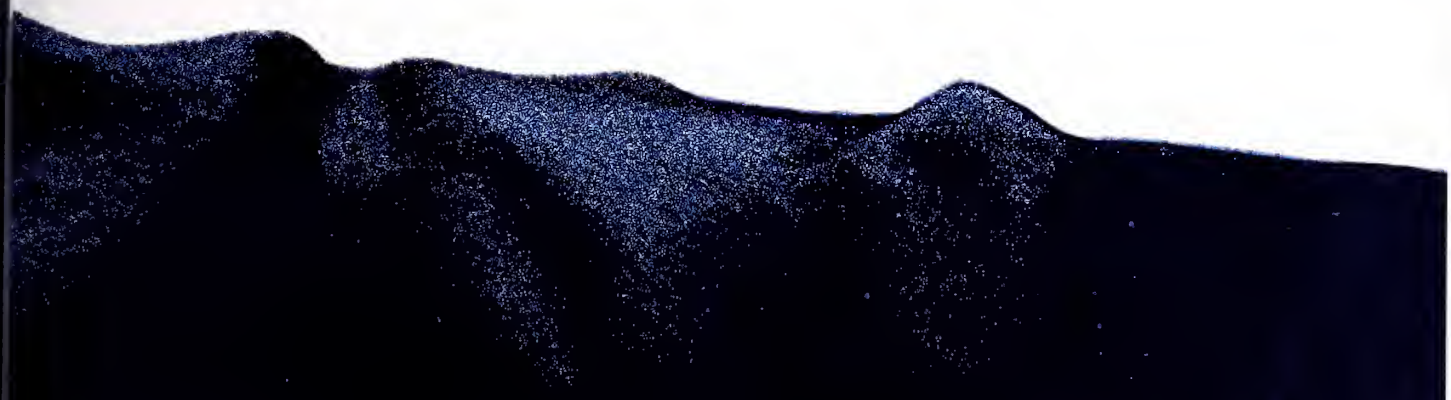


WANS® CHILDREN SUPPRETTES™

rectal antinauseant/antiemetic

pyrilamine maleate 25 mg; sodium pentobarbital 30 mg
Warning: may be habit forming

*Based on usage by dosage form; data gathered by independent research organization.



SCRIPTION: WANS® Children: (Blue) pyrilamine maleate mg and pentobarbital sodium* ½ gr (30 mg) scored for dosage. WANS® No. 1: (Pink) pyrilamine maleate 50 mg d pentobarbital sodium* ¾ gr (50 mg) scored for ½ dosage. ANS® No. 2: (Yellow) pyrilamine maleate 50 mg and ntobarbital sodium* 1½ gr (100 mg) scored for ½ dosage.

ARNING: may be habit forming.

NTRAINDICATIONS: Infants under 6 months. Acute ermittent porphyria, known hypersensitivity to barbiturates antihistamines, known previous barbiturate addiction, vere hepatic impairment, CNS injury, senility, and presence uncontrolled pain.

ARNINGS: Barbiturates may be habit forming. Pre-existing ychologic disturbances may be aggravated. Idiosyncratic actions may occur. Acquired sensitivity may result in allergic actions. Safety in pregnancy has not been established.

RECAUTIONS: Use cautiously with other sedative, hypnotic narcotic agents. Use with caution in patients with acute or ronic hepatic disease, fever, hyperthyroidism, diabetes ellitus, severe anemia, congestive heart failure, or a history drug dependence or suicidal tendencies. May impair ertness and coordination with increased accident risk.

ADVERSE REACTIONS: Drowsiness, fatigue, vertigo, incoordination, tremor, muscle weakness, ataxia, hypotension, respiratory depression, delirium and coma. Dryness of nose, mouth, and throat, pupillary dilatation or blurred vision, urinary retention, abdominal pain, nausea, vomiting, diarrhea, and hypersensitivity reactions. Overdose may result in hallucinations, excitement, ataxia, incoordination, athetosis, convulsions, and death.

DOSAGE AND ADMINISTRATION: Rectally, children 2-12 years of age, one WANS® CHILDREN every 6-8 hours as required. Children under 2 years of age may receive ½ the above dosage. *Adults:* Rectally, one WANS® No. 1 Supprette™ to inhibit mild nausea and/or vomiting; one WANS® No. 2 Supprette to control pernicious vomiting. Repeat doses for adults should be 4 to 6 hours apart, not to exceed four doses in 24 hours. Moisten finger and Supprette with water before inserting. Optimum dosage must be determined in each case by the clinical response.

WEBCON

Webcon Pharmaceutical Division
Alcon Laboratories, Inc.
Fort Worth, Texas 76101

BY LARRY DIXON

Continuing Medical Education

PULMONARY DISEASE

1. Which of the following is/are commonly found in a patient with sarcoidosis?
   (1) Elevation of gamma globulin
   (2) Impairment of liver function
   (3) Reduction in carbon monoxide diffusing capacity in the absence of diffuse parenchymal infiltration on a roentgenogram of the chest
   (4) Hypercalcemia and hypercalciuria
2. Which of the following statements concerning Hodgkin's disease of the lungs is/are true?
   (1) Lung involvement may be interstitial
   (2) Lung involvement may be endobronchial
   (3) Bilateral lung infiltrations are frequent in severe systemic involvement
   (4) With bilateral diffuse lung involvement, irradiation is frequently successful in control of the disease
3. Which of the following is/are associated with recurrent pneumonia?
   (1) Hypogammaglobulinemia
   (2) Bronchial adenoma
   (3) Achalasia
   (4) Goodpasture's syndrome
4. Which of the following statements regarding silo filler's disease is/are correct?
   (1) It occurs in farmers from inhalation of phosgene
   (2) In the acute stage, there is a bronchiolitis with loss of bronchiolar epithelium
   (3) Corticosteroids are of no value in teating the acute stage of the disease
   (4) In the acute stage of the disease, pulmonary function would be expected to show a low vital capacity and total lung capacity, a decreased carbon monoxide diffusing capacity and arterial blood oxygen desaturation
5. Which of the following occur (s) in patients who have bronchial adenomas?
   (1) Facial erythema and flushing
   (2) Hemoptysis
   (3) Lymph node metastases
   (4) Recurrent pneumonia
6. Which of the following statements concerning primary atypical pneumonia (Mycoplasma Pneumoniae pneumonia) is/are true?
   (1) Tetracyline therapy may be effective
   (2) Mycoplasma pneumoniae can readily be cultured from the sputum on the culture media usually employed
   (3) A high cold agglutination titer is helpful in the diagnosis
   (4) Mycoplasma pneumoniae pneumonia is commonly complicated by a pleural effusion
7. Scanning the lungs after an injection of I-tagged macroaggregates of serum albumin is useful in the diagnosis of pulmonary embolism because
   (1) An area of markedly diminished or absent radioactivity over the lung is diagnostic of pulmonary embolism
   (2) All pulmonary emboli are associated with an abnormal scan
   (3) The technique permits visualization of the embolus
   (4) The scan is a means of evaluating regional perfusion of the lungs
8. Which of the following statement(s) concerning pneumocystis carinii pneumonia is/are correct?
   (1) It occurs in patients receiving immunosuppressive chemotherapy
   (2) Pulmonary cavitation is commonly seen
   (3) Pentamidine isothionate is an effective therapeutic agent
   (4) The organism can be readily isolated from the sputum
9. A 46-year-old rancher sustained a flail chest injury in an automobile accident. A tracheostomy was performed immediately and ventilation with a pressure-cycled machine provided the following arterial blood gas studies: pH 7.46, pO_2 39 mm Hg, pCO_2 32 mm Hg. The patient was in marked respiratory distress, and after 30 minutes of ventilation with 100 per cent oxygen, the arterial blood pO_2 was 31 mm Hg. Which of the following statements is/are true?
   (1) Further therapy with 100 per cent oxygen may cause oxygen toxicity
   (2) The chest should be sand-bagged to prevent paradoxical ventilation
   (3) Continuous positive pressure breathing, using end-expiratory hold or retard, is the therapy of choice
   (4) The degree of hypoxemia that this patient shows is well tolerated in traumatized patients
10. A 48-year-old man presented with a slight discomfort in the left lower chest, but no fever. Which of the following statements is/are correct?
   (1) A negative PPD (second strength - 250 T.U.) skin test excludes tuberculosis as a diagnosis
   (2) A pleural effusion accompanying pulmonary infarction is almost always bloody
   (3) Neoplastic cells can be identified in the pleural fluid of 90 per cent of patients with effusions due to malignancy
   (4) The finding of nonspecific pleuritis on needle biopsy does not exclude tuberculosis

DIRECTIONS SUMMARIZED

A — 1, 2, 3 ONLY
B — 1, 3 ONLY
C — 2, 4 ONLY
D — 4 ONLY
E — All are Correct

CORRECT ANSWERS:

1. E
2. A
3. A
4. C
5. E
6. B
7. D
8. B
9. B
10. D

Synthroid®
(sodium levothyroxine, U.S.P.) FLINT
or
desiccated thyroid



consider the differences...

Desiccated animal gland thyroid products can vary in potency from batch to batch.

Because iodine content rather than biological assay is used to measure the standard of many desiccated thyroid products, biologic activity can vary from batch to batch. Even when biologic assay is employed, biologic activity can only be approximated.



1 It is recognized that T_4 and T_3 content in desiccated thyroid and thyroglobulin varies from animal to animal, by animal species, geography, and animal diet.

2 Of therapeutic concern: In addition to varying amounts of T_4, desiccated thyroid may contain varying amounts of T_3, a potent compound with rapid onset and fleeting action that can produce metabolic surges.

3 Even when kept under proper storage conditions, desiccated thyroid deteriorates more rapidly than the synthetic hormone.

4 The "usual maintenance dose" for the widely prescribed desiccated thyroid is "from 1 grain to 3 grains per day, but it may vary, in individual patients from 1/2 grain to 10 grains."[1] The "usual maintenance dose" of the most widely prescribed thyroglobulin (which is also a desiccated thyroid product) is "0.5 to 3.0 grains daily."[2]

1. Armour Thyroid (Tablets). 1975 Physicians' Desk Reference. p. 561.
2. Proloid® (thyroglobulin). 1975 Physicians' Desk Reference. p. 1575.

Every batch of Synthroid® T_4 is of controlled potency. (sodium levothyroxine, U.S.P.) FLINT



SYNTHROID is T_4. It provides your patients with everything they need for complete thyroid replacement therapy.

1 Sodium levothyroxine is *not derived* from any animal gland source. It is a synthetic and, since sodium levothyroxine is the only active ingredient, its weight is the sole determinate of potency.

2 SYNTHROID (sodium levothyroxine) is T_4 which is converted by the patient to T_3 at the cellular level, thereby providing a physiologic source and amount of T_3 to meet metabolic needs for complete thyroid replacement therapy. Because the onset of effect is slower and more steady, the possibility of sudden metabolic surges is reduced with SYNTHROID therapy.

3 SYNTHROID (sodium levothyroxine) products have a longer and more reliable shelf life than Thyroid U.S.P. when kept under the same proper storage conditions. There is no animal protein present in SYNTHROID products.

4 A recent study of 44 patients with hypothyroidism indicates that 89 percent of the patients were maintained with doses of L-thyroxine (SYNTHROID) between 100 mcg. and 200 mcg. (0.1 mg. and 0.2 mg.) per day.[3]

3. Stock, J.M., Surks, M.I., and Oppenheimer, J.H.: Replacement dosage of L-thyroxine in hypothyroidism. A re-evaluation. New Engl. J. Med. *290*:529-33, 1974.

Eliminates many of the uncertainties of desiccated thyroid therapy.

Synthroid®

(sodium levothyroxine, U.S.P.) FLINT

FLINT LABORATORIES
DIVISION OF TRAVENOL LABORATORIES, INC.
Deerfield, Illinois 60015

See reverse side for full prescribing information.

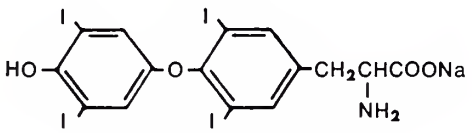
Synthroid®
(sodium levothyroxine, U.S.P.*) FLINT

Synthroid Tablets—for oral administration
Synthroid for Injection—for parenteral administration



Description

SYNTHROID (sodium levothyroxine) **Tablets** and SYNTHROID **Injection** contain synthetic crystalline sodium levothyroxine (L-thyroxine). L-thyroxine is the principal hormone secreted by the normal thyroid gland.



Sodium Levothyroxine

Actions

SYNTHROID (sodium levothyroxine) **Tablets,** taken orally, provide hormone that is readily absorbed from the gastrointestinal tract. SYNTHROID **Injection** is effective by any parenteral route. Following absorption, the synthetic L-thyroxine provided by SYNTHROID products cannot be distinguished from L-thyroxine that is endogenously secreted. Each is bound to the same serum proteins and each exhibits a six to seven day circulating half-life in the euthyroid individual.

Both SYNTHROID products will provide L-thyroxine as a substrate for physiologic deiodination to L-triiodothyronine. Therefore, patients taking SYNTHROID products will demonstrate normal blood levels of L-triiodothyronine even when the thyroid gland has been surgically removed or destroyed by radioiodine. Administration of levothyroxine alone will result in complete physiologic thyroid replacement.

Indications

SYNTHROID (sodium levothyroxine) products serve as specific replacement therapy for reduced or absent thyroid function of any etiology. SYNTHROID **Injection** can be used intravenously whenever a rapid onset of effect is critical, and either intravenously or intramuscularly in hypothyroid patients whenever the oral route is precluded for long periods of time.

Contraindications

There are no absolute contraindications to SYNTHROID (sodium levothyroxine) therapy. Relative contraindications include acute myocardial infarction, uncorrected adrenal insufficiency and thyrotoxicosis. (See WARNINGS)

Warnings

Patients with cardiovascular diseases warrant particularly close attention during the restoration of normal thyroid function by any thyroid drug. In such cases, low initial dosage increased slowly by small increments is indicated. Occasionally, the cardiovascular capacity of the patient is so compromised that the metabolic demands of the normal thyroid state cannot be met. Clinical judgment will then dictate either a less-than-complete restoration of thyroid status or reduction in thyroid dosage.

Endocrine disorders such as diabetes mellitus, adrenal insufficiency (Addison's disease), hypopituitarism and diabetes insipidus are characterized by signs and symptoms which may be diminished in severity or obscured by hypothyroidism. SYNTHROID (sodium levothyroxine) therapy for such patients may aggravate the intensity of previously obscured symptoms and require appropriate adjustment of therapeutic measures directed at these concomitant disorders.

Thyroid replacement may potentiate the effects of anticoagulants. Patients on anticoagulant therapy should have frequent prothrombin determinations when instituting thyroid replacement to gauge the need to reduce anticoagulant dosage.

Precautions

Overdosage with any thyroid drug may produce the signs and symptoms of thyrotoxicosis, but resistance to such factitious thyrotoxicosis is the general rule. With SYNTHROID (sodium levothyroxine) **Tablets,** the relatively slow onset of action minimizes the risk of overdose but close observation in the weeks following institution of a dosage regimen is advised. Treatment of thyroid hyperactivity induced by oral medication is confined to interruption of therapy for a week, followed by reinstitution of daily therapy at an appropriately reduced dosage.

Adverse reactions

Adverse reactions are due to overdose and are those of induced hyperthyroidism.

Dosage and administration

For most adults, a final dosage of 100 mcg (0.1 mg) to 200 mcg (0.2 mg) of SYNTHROID (sodium levothyroxine) **Tablets** daily will restore normal thyroid function and only occasionally will patients require larger doses. Failure to respond adequately to a daily oral intake of 400 mcg (0.4 mg) or more is rare and should prompt reconsideration of the diagnosis of hypothyroidism, special investigation of the patient in terms of malabsorption of L-thyroxine from the gastrointestinal tract or poor adherence to therapy.

The concomitant appearance of other diseases, especially cardiovascular diseases, usually dictates a replacement regimen with initial doses smaller than 100 mcg/day (0.1 mg).

In otherwise healthy adults with relatively recent onset of hypothyroidism, full replacement dose of 150 mcg (0.15 mg) or 200 mcg (0.2 mg) has been instituted immediately without untoward effect and with good therapeutic response. General experience, however, favors a more cautious approach in view of the possible presence of subclinical disorders of the cardiovascular system or endocrinopathies.

The age and general physical condition of the patient as well as the severity and duration of hypothyroid symptoms determine the starting dosage and the rate of incremental dosage increase leading to a final maintenance dosage. In the elderly patient with long standing disease, evidence of myxedematous infiltration and symptomatic, functional or electrocardiographic evidence of cardiovascular dysfunction, the starting dose may be as little as 25 mcg (0.025 mg) per day. Further incremental increases of 25 mcg (0.025 mg) per day may be instituted at three to four week intervals depending on patient response. Conversely, otherwise healthy adults may be started at higher daily dosage and raised to the full replacement dosage in two to three weeks. Clearly it is the physician's judgment of the severity of the disease and close observation of patient response which determines the rate of dosage titration.

Laboratory tests to monitor thyroid replacement therapy are of limited value. Although measurement of normal blood levels of thyroxine in patients on replacement regimens frequently coincides with the clinical impression of normal thyroid status, higher than normal levels on oral replacement of levothyroxine occasionally occurs and should not be considered evidence of overdosage per se.

In all cases, clinical impression of the well-being of the patient takes precedence over laboratory determination in determining the appropriate individual dosage.

In infants and children, there is a great urgency to achieve full thyroid replacement because of the critical importance of thyroid hormone in sustaining growth and maturation. Despite the smaller body size, the dosage needed to sustain a full rate of growth, development and general thriving is higher in the child than in the adult, as much as 300 mcg (0.3 mg) to 400 mcg (0.4 mg) per day.

In myxedema coma or stupor, without concomitant severe heart disease, 200 to 500 mcg of SYNTHROID **Injection** may be administered intravenously as a solution containing 100 mcg/ml. Although the patient may show evidence of increased responsivity within six to eight hours, full therapeutic effect may not be evident until the following day. An additional 100 to 300 mcg or more may be given on the second day if evidence of significant and progressive improvement has not occurred. Like the oral dosage form, SYNTHROID **Injection** produces a predictable increase in the circulating level of hormone with a long half-time. This usually precludes the need for multiple injections but continued daily administration of lesser amounts intravenously should be maintained until the patient is fully capable of accepting a daily oral dose.

In the presence of concomitant heart disease, the sudden administration of such large doses of L-thyroxine intravenously is clearly not without its cardiovascular risks. Under such circumstances, intravenous therapy should not be undertaken without weighing the alternative risks of the myxedema coma and the cardiovascular disease. Clinical judgment in this situation may dictate smaller intravenous doses of levothyroxine.

SYNTHROID **Injection** by intravenous or intramuscular routes can be substituted for the oral dosage form when ingestion of SYNTHROID **Tablets** is precluded for long periods of time.

How supplied

SYNTHROID (sodium levothyroxine) **Tablets** are supplied as scored, color-coded compressed tablets in 6 concentrations: 25 mcg (0.025 mg)—orange . . . 50 mcg (0.05 mg)—white . . . 100 mcg (0.1 mg)—yellow . . . 150 mcg (0.15 mg)—violet . . . 200 mcg (0.2 mg)—pink . . . 300 mcg (0.3 mg)—green. Depending on strength, these tablets are available in bottles of 100, 500, 1000 and 5000.

SYNTHROID (sodium levothyroxine) for **Injection** is supplied in 10 ml vials containing 500 mcg of lyophilized active ingredient and 10 mg of Mannitol, U.S.P. A separate 5 ml vial containing Sodium Chloride Injection, U.S.P. is provided as a diluent.

Directions for reconstitution

Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml of the Sodium Chloride Injection, U.S.P. to the vial. Shake vial to insure complete mixing. **Use immediately** after reconstitution. Discard any unused portion.

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SIGHTS & SOUNDS

Chest pain is a symptom with which physicians are instantly confronted. It represents one of the most intriguing and urgent diagnostic challenges to the practicing physician. The Medical Association of the State of Alabama has received a special two-part television series entitled "The Diagnostic Challenge of Chest Pain."

These programs were produced by the Network for Continuing Medical Education of New York City. MASA receives these programs as part of the bi-weekly videocassette service of NCME which enables the Association to build its own Cassette Resource Center.

Featured on these programs is Alfred Soffer, M.D., Professor of Cardiology at the University of Health Sciences–Chicago Medical School, Chicago and Editor-in-Chief of *Chest*, the Journal of the American College of Chest Physicians.

Because the clinician must consider many diseases besides coronary disease in differential diagnosis, Dr. Soffer is joined on the programs by: a thoracic surgeon, R. D. Henderson, M.D., F.R.C.S. (C)., Staff Surgeon, Toronto General Hospital and Assistant Professor of the Department of Surgery at the University of Toronto; a neurologist, Linda D. Lewis, M.D., Chief of the Neurology Clinic at the Neurological Institute of Columbia Presbyterian Medical Center, New York; a pulmonary specialist, Barry William Levine, M.D., Assistant Professor of Medicine, Harvard Medical School, and Chief, Outpatient Pulmonary Services, Massachusetts General Hospital; and a cardiologist, Morton E. Tavel, M.D., Associate Professor of Medicine at the Indiana University School of Medicine.

MASA will be receiving 26 of these tapes throughout the next year. Each tape will have three clinical experiences. The tapes are all creditable toward the Physician's Recognition Award of the AMA, and will be made available to physicians visiting the central office or who possess the videocassette equipment and wish to borrow a tape from the Education Department.

To order contact the Education Department, Medical Association State of Alabama, 19 South Jackson Street, Montgomery, Alabama, 36104.

The following films are made available from Eaton Laboratories. They may be obtained by contacting your local Eaton representative or by writing to Eaton Medical Film Library, Eaton Laboratories Division, Morton-Norwich Products, Inc., Norwich, New York 13815.

PATHOPHYSIOLOGY OF DIARRHEA: AN APPROACH TO THERAPY (840) Henry J. Binder, M.D., Emphasis is placed on the new concept that intestinal electrolyte secretion may be the common denominator in many diarrheal syndromes. Further, it is additionally demonstrated that the mechanism of secretion differs in various diseases and that therapy is dependent upon understanding of the pathophysiology. The three conditions which are presented in depth are: celiac sprue, cholera and lactase deficiency. 16 mm., color and sound, 17 minutes, (1973) IV

UROLOGY

URETEROSIGMOIDOSTOMY AND CLOSURE OF EXSTROPHY OF THE URINARY BLADDER (800) Willard E. Goodwin, M.D., Gilbert Dale, M.D., Joseph J. Kaufman, M.D. The patient is a five-year-old boy with typical exstrophy of the urinary bladder and associated epispadias. There is also a large right inguinal hernia. The patient has had an iliac osteotomy to increase the mobility of the pelvic bone structures one week before operation. The film shows mobilization and closure of the bladder exstrophy. Incidental procedures also shown are intra-abdominal closure of right hernia defect and right orchiopexy, excision of Meckel's diverticulum and the incidental appendectomy. The most important part of the film clearly shows the author's technique of open transcolonic ureterosigmoidostomy for urinary diversion. The primary closure of the abdominal wall defect made possible by iliac osteotomy is clearly demonstrated. 16 mm., color and sound, 20 minutes (1974)

TRANSABDOMINAL BILATERAL RETROPERITONEAL LYMPHADENECTOMY FOR TESTIS TUMORS (842) William J. Staubitz, M.D., Claude E. Merrin, M.D., Imre V. Magoss, M.D., Gerald P. Murphy, M.D., D.Sc. This film shows the diagnostic procedures and the operative procedure for the treatment of testicular tumors, Stage I and II, which are non-seminomatous. It also gives the results of over 65 patients having at least a three-year follow-up, and most with a five-year follow-up. 16 mm., color and sound, 15 minutes (1974)

REPAIR OF PENOSCROTAL URETHRAL FISTULA AND DIVERTICULUM (863) James W. Morrow, M.D. Diverticulum and fistula of the male urethra are usually the result of catheter trauma and subsequent abscess formation. This film illustrates a technique for treating these lesions without proximal urinary diversion by urethrostomy or cystostomy drainage. In a modern series of cases to date, there has been a high rate of success in terms of both early and late recurrence of fistula. These results suggest that this approach to management may offer an improved method of treatment in terms of methods which have been described in the literature. 16 mm., color and sound, 16 minutes, (1974)

SMALL-CARRION URETHROPLASTY FOR MANAGEMENT OF BULBOUS AND DEEP MEMBRANOUS URETHRAL STRICTURES (849) Michael P. Small, M.D., Hernan M. Carrion, M.D., Management of strictures in the proximal bulbous and membranous urethra in adults and children has always been an enigma to the urologist. The authors present their modification of the Turner-Warwick Urethroplasty which has been used

successfully in 20 patients without the use of special instruments by using a routine perineal prostatectomy incision and performing the urethral-scrotal inlay anastomosis under direct vision through this incision. 16 mm., color and sound, 18 minutes (1973) IV

GASTROENTEROLOGY

ENTERAL HYPERALIMENTATION: TECHNIQUES OF INTUBATION OF FINE FEEDING TUBES (797) Mitchell V. Kaminski, Jr., M.D., This film introduces the concept of enteral hyperalimentation. Patient demonstration and animation are used to clearly present the technique. Potential hazards are identified and means of avoiding complications are outlined. Specifically covered is (1) nasogastric intubation with fine feeding tubes, (2) solution preparation and administration, (3) hyperosmolar dehydration, etiology and prevention, (4) diarrhea, etiology and prevention, (5) calculation of nitrogen balance (bed side). 16 mm., color and sound, 15 minutes (1974) IV

NUTRITION IN THE INJURED PATIENT (838) Hastings K. Wright, M.D., This film discusses nutrition in the injured and post-operative patient. A comparison is made between the nutritional status of the starved individual and that of the post-operative patient. Although similarities exist, the surgical patient loses more protein than in simple starvation. This protein loss cannot be prevented by calories alone. The requirement of protein replacement is emphasized. 16 m.m., color and sound, 15 minutes (1973) IV

ABSORPTION (839) Henry J. Binder, M.D. This film is concerned with the mechanisms of intestinal absorption in general, methods of studying absorption, and some details of electrolyte, water, protein, and carbohydrate absorption. 16 mm., color, sound 20 minutes (1973) IV

Geriatric Medicine For The Practitioner
December 13, 1975
Duke University Medical Center
Durham, North Carolina

Credit: 6 Hours AMA Category 1 Available—AAFP Credit Requested. Fee: $35. Sponsored by: Duke University Center For The Study Of Aging And Human Development, American Geriatrics Society, Duke Family Practice Clinic. Contact: Dorothy Heyman, Box 3003, Duke University Medical Center, Durham, North Carolina 27710.

RHEUMATIC DISEASE: Management Options
December 19-20, 1975
University of Kentucky Medical Center
Lexington, Kentucky

Registration Fee: $75.00. For further information, contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

U S POSTAL SERVICE

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(Act of August 12, 1970: Section 3685, Title 39 United States Code)

1. TITLE OF PUBLICATION: The Journal of the Medical Association of the State of Alabama	2. DATE OF FILING: 9/15/75
3. FREQUENCY OF ISSUE: Monthly	3A. ANNUAL SUBSCRIPTION PRICE: $12.00

4. LOCATION OF KNOWN OFFICE OF PUBLICATION (Street, city, county, state and ZIP code) (Not printers): 19 South Jackson Street, Montgomery Montgomery, Alabama 36104

5. LOCATION OF THE HEADQUARTERS OR GENERAL BUSINESS OFFICES OF THE PUBLISHERS (Not printers): 19 South Jackson Street, Montgomery, Alabama 36104

6. NAMES AND ADDRESSES OF PUBLISHER, EDITOR, AND MANAGING EDITOR

PUBLISHER (Name and address): Medical Association of the State of Alabama, Montgomery, Alabama 36104

EDITOR (Name and address): William L. Smith, M. D., 19 South Jackson Street, Montgomery, Ala. 36104

MANAGING EDITOR (Name and address): L. P. Patterson, 19 South Jackson Street, Montgomery, Alabama 36104

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B. PAID CIRCULATION 1. SALES THROUGH DEALERS AND CARRIERS, STREET VENDORS AND COUNTER SALES	None	None
2. MAIL SUBSCRIPTIONS	2,911	3,042
C. TOTAL PAID CIRCULATION	2,911	3,042
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DEAN'S REPORT:



Medical School with a vision

ARTHUR J. DONOVAN, M.D.
Acting Dean, College of Medicine
University of South Alabama, Mobile

In 1965, one year following the admission of the first students to the newly established University of South Alabama in Mobile, the feasibility of development of a medical school was evaluated by representatives of the Association of American Medical Colleges and the AMA. Interest in this development was greatly enhanced by the enthusiastic support of the Medical Society of Mobile County.

The establishment of the Medical School was authorized by the Legislature in August, 1969 and the pace of planning was accelerated. Original projections had indicated that the first students would be admitted in September, 1973.

This date was subsequently advanced and a Charter Class of 23 students was admitted in January, 1973.

By acceleration, these students completed their first year in the Summer of 1973 and entered directly into their second year at that time. This Charter Class will graduate in June of 1976. The three subsequent classes admitted to the College of Medicine number 64 students each.

Projection for enrollment in the College of Medicine envisions an ultimate entering class of 96 students. The Liasion Committee on Medical Education has not yet granted permission to the College of Medicine to enlarge its class size beyond 64 entering Freshmen.

By action of the Board of Trustees of the University of South Alabama on January 19, 1973, 25 per cent of the students admitted to the College of Medicine are from rural counties in Alabama. This action was taken in the belief that these students would be more likely to return to such areas for practice.

In 1971-72, 38 physicians were participants in Graduate Education Programs at the Mobile General Hospital. This number was increased to 70 in 1975-76. Projections indicate that by 1980 there will be approximately 250 physicians engaged in the Graduate Education Programs conducted by the University of South Alabama. Approximately 60 per cent of these physicians will be in the field of general or primary care.

The University and the Faculty are most cognizant of the vital importance of expansion of programs in Graduate Education. Opportunities must be provided for students who complete their undergraduate education in Alabama to proceed to graduate education within this State. Failure to do so will require that students go to other parts of the country for graduate training with the probability that many will not return to Alabama for practice.

The College of Medicine is emphasizing the education of primary care physicians. Hopefully, the initial enrollees in Graduate Education in Family Practice will be accepted in July, 1976. Educational programs at both remote site and within the "physical" confines of the University are intended. It is projected that at least 12 "finished" Family Practitioners will complete the Program in Family Practice each year.

Sixty-eight full-time Faculty have been recruited for the College of Medicine. Twenty-eight of these are members of the Basic Science Departments. Additional Faculty in the Clinical Departments are being recruited. In the Clinical Departments, full-time Faculty are presently functioning and 156 physicians from the local medical community serve as Voluntary Faculty and participate actively in both the undergraduate and the graduate educational programs.

Some of the facilities include:

Medical Sciences Building: This 156,000 sq. ft. building has been constructed on the main campus and houses the Basic Science Departments, laboratories for teaching and research and the principal Vivaria facilities of the College of Medicine.

University of South Alabama Medical Center: Located approximately 5 miles from the University and near to the center of the City of Mobile.

Hospital and Clinics: The Hospital, which has been in continuous operation since the "Hospital Royal" of the early eighteenth century, has been known by many names. From 1959 – 1975, it was called The Mobile General Hospital. On April 6, 1975, the Board of Trustees of the University of South Alabama designated the entire complex on Fillingim Street as the University of South Alabama Medical Center. This latest change was intended to indicate the relationship of the facilities to the University and to the College of Medicine.

The Moorer Clinical Science Building is a 30,000 sq. ft. Clinical Sciences Building which provides Faculty housing, teaching space and research laboratories for the Faculty in Clinical Departments.

The Mastin Building is a 54,879 sq. ft. structure which houses the Mastin School of Nursing and provides additional facilities for the College of Medicine. Extensive teaching space is available in this building.

Initial steps have been taken to establish the program in continuing education. The University has been approved for Category 1 credit in continuing education by the AMA. An Office of Continuing Education has been opened (Telephone 205/476-3752).

The program being developed envisions not only activity at the College of Medicine, but cooperation with medical communities in developing programs in continuing education for physicians in their location of practice.

In this brief report, an attempt has been made to summarize activity at the College of Medicine at the University of South Alabama in Mobile. Subsequent reports will focus in more depth on specific facets on these programs. The College of Medicine welcomes the opportunity to familiarize the medical profession within the State with the activities in medical education in Mobile.

ALABAMA DEPARTMENT OF PUBLIC HEALTH:

Bureau of Preventable Diseases

ST. LOUIS ENCEPHALITIS UPDATE

St. Louis Encephalitis is caused by an arbovirus carried by the vector Culex mosquito. A more complete description of the disease and its epidemiology appears in the previous issue of this Journal. Since St. Louis Encephalitis has many varied presentations, any aseptic meningitis or encephalitis-like syndrome should be suspect for St. Louis Encephalitis.

The Department of Public Health is requesting that the physician who sees a case which may be suspect draw blood for acute virus titers and immediately notify his county health department by telephone, or call the State Health Department at 832-3207. Blood for followup convalescent titers should be drawn at two weeks and again at six weeks after the acute sample has been drawn.

As of noon on September 29, 1975, there have been 22 cases of St. Louis Encephalitis confirmed by laboratory studies and an additional 18 cases are presumptive for St. Louis Encephalitis with a high titer on the acute serum and are awaiting convalescent titers. An additional 93 cases are also under investigation and awaiting laboratory reports. To date there have been 6 deaths in patients suspected of having St. Louis encephalitis. (Table 1 gives a breakdown of cases reported by county.

Since the virus is carried by the Culex mosquito, control activities consist of eliminating the vector. The Culex mosquito prefers to breed in polluted stagnant water, but will breed in any stagnant water. Its flight range is approximately one mile. Culex mosquitos are not attracted to lights. Control activities involve larviciding as an early and ongoing method of control. Sealing of cess pools, septic tanks and clean up of old tires, cans, buckets, etc., which act as breeding places are effective control measures. Where adult mosquito counts are high, adulticiding can be effective.

PERTUSSIS

During July 1975, Alabama reported 36 cases of pertussis-like illness. While a number of these cases occurred in immunized persons, physicians should be aware that an identical syndrome can be caused by adenoviruses, Bordetella parapertussis and other organisms. The bacteriologic diagnosis of pertussis is best made by culturing nasopharyngeal swabs on Bordet-Genou media or testing direct smears made from nasopharyngela swabs by the fluorescent antibody (FA) technique.

Darkfield Microscopy is available to physicians at no cost by calling 832-3205 collect at any time. A technician and equipment will be dispatched to your office.

SYPHILIS

The disease remains epidemic in Alabama. There have recently been exacerbation of epidemic level in several parts of Alabama. Lack of suspicion for the disease is in large part responsible for the continued high morbidity reported. The treatment in the primary and secondary stages continue to be 2.4 million units of long acting penicillen (Bicillin). Two ineffective rememdies recently reported were "Preparation H" and Vaseline to an open chancre. Physicians are encouraged to request Darkfield consultation in their office. This service is available in every part of the State by calling 205/832-3205.

RUBELLA IMMUNIZATION OF CHILDREN OF PREGNANT MOTHERS

Data available now would seem to be sufficient to resolve this question. While virus shedding does occur in immunized children, it is intermittent and of shorter duration than in natural rubella infection. Thus Krugman and Ward conclude that "...rubella vaccine may be given to children whose mothers are pregnant" with the known risk of rubella virus infection to pregnant women. It would seem important to decrease this risk. A limited bibliography is provided.

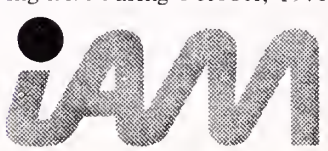
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2. *J. AMA* 215: 609-612, 1971.
3. *J. Pediat.* 78: 306-307, 1971.
4. *AM J. Public Health* 61: 1392-1402, 1971.
5. *AM J. Dis. Child.* 122: 122-128, 1971; 123: 28-30, 1972; 123: 465-468, 1972.
6. Krugman S. & Ward R.: *Infectious Diseases of Children and Adults,* 5th Ed. CV Mosby Co., St. Louis, 1973, p. 247.

TETANUS

Neonatal tetanus is a rare disease in the United States. There were only 5 cases in 1970 and 1971. The infection generally results from unsanitary practices and contamination of the umbilical stump. Fully immunized pregnant mothers, especially those in high risk populations, will provide protection for the infant during the crucial neonatal period.

IMMUNIZATION ACTION MONTH

The month of October has been designated Immunization Action Month (IAM) as a continuing cooperative effort, begun in 1973, to reverse the trend of declining immunization levels among 1-4 year-old children against polio, measles, rubella, mumps, diphtheria, pertussis and tetanus. The Alabama Department of Public Health and the AMA, along with a host of public and private health agencies, voluntary service groups and pharmaceutical firms are joining together as the coordinating agency in promoting IAM during October, 1975.



Digest of Actions of the State Committee of Public Health

The State Committee of Public Health at its meeting on September 17, 1975 took the following actions:

- Approved a new Certificate of Live Birth to conform with the need for better certification of medical and health data for confidential study purposes. The new certificate will be effective January 1, 1976.
- Appointed E. Frederick Campbell, Jr., M.D. for a term of three years expiring October 22, 1978, as a member of the Hospital Construction Advisory Council.
- Heard plea from Sterling Drug Company for a reduced classification of Pentazocine Oral Tablets (Talwin). (This matter was held for a later meeting to allow time for review of the data.)
- Considered an increased bed allocation for Tuberculosis at Lanier Memorial Hospital, Langdale, to four beds effective December 1, 1975.
- Advised of an enforcement order issued by the State Health Department to Southeastern Elementary School in Blount County to safeguard its water supply and prevent the use of unsafe water from a bacteriological and chemical standpoint. Advised that follow-up notices for all school water supplies indicating potential problems are being conducted by the State Health Department.
- Received a current report on St. Louis Encephalitis. By September 15, a total of 83 cases were reported, 10 of these were confirmed and 11 presumptive. 2 deaths have been reported, neither confirmed at this time. 23 counties reported suspected cases.
- Discussed proposed change for interns or first year residents as housestaff in approved training hospitals for authorization to prescribe controlled substances. No change was made in the existing policy previously followed by the Committee requiring that any prescriptions be controlled by the institution with proper identification of individual physicians.
- Approved issuance of 3 assurances of need.
- Recommended disapproval of Enterprise Nursing Home request for 37 additional beds as not consistent with the Alabama Master Hospital Plan due to an outstanding inactive Certificate Of Need by another applicant in that area.
- Approved relocation of Outpatient Dialysis Unit for Certificate of Need at the UAB Hospital.
- Approved requested change of 45 existing TB beds to long-term care beds under the Master Hospital Plan for Hale Memorial Hospital and supported change of licensure of this facility and Mountainview Hospital in Gadsden to specialized hospitals, cronic disease, upon proper application. This would cause the phase-out of all specialized TB hospitals by October, 1975, as previously recommended by the Committee.
- Approved amended chapter on Podiatry for the Comprehensive Health Plan.
- Deferred Phase II Physician Manpower Study for later consideration.
- Authorized release of summary data only on Health Manpower with restrictions on individual data which could be abused or misused.

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ACCREDITED BY THE J. C. A. H.

John Allan Wyeth

EMMETT B. CARMICHAEL

Reprinted from "Bulletin of the History of Medicine," Vol. XVIII, Number 3, October, 1945.

The subject of this essay was a native Alabamian and one of those southern practitioners who went to New York and became well known through his professional activities. He is probably even better known for his efforts in founding the first post-graduate medical school in the United States.

It was near the banks of the Tennessee River in Marshall County, Alabama, that John Allan Wyeth was born on May 26, 1845. His birthplace was the Cherokee Missionary Station which was founded by the Presbyterian Church. The Missionary Station was about three miles from Guntersville. The building continued to serve as a residence until about 1930 when it was razed. The spot is now covered by the waters of the river since the Tennessee Valley Authority built the dam below Guntersville.

John Allan Wyeth was descended from English, German, Scotch and Welsh ancestors who settled in America. A grandfather of each of his parents fought in the Revolutionary War for the independence of the Colonies. The founder of this branch of the family in America was Nicholas Wyeth, who came over from England in 1630 with one of the Winthrop colonies. He settled and became proprietor of lands in what is now Cambridge, Mass., about 1640.

Judge Louis Weiss Wyeth (father of John Allan) was the sixth child and the next to the youngest of five brothers. He received a classical education at Harrisburg Academy, studied law, was admitted to practice and three years later in 1836, he settled in Marshall County, Alabama where he became a prominent lawyer. He was elected County Judge in 1837 and later on served in the state legislature. He married Euphemia Allan, daughter of a Presbyterian minister, John Allan, and his wife, Nancy Hodge, at Huntsville, Alabama, on April 9, 1839. John Allan Wyeth was the fourth and youngest child of this marriage.

In his fifteenth year, John Allan passed the college entrance examinations and on February 1, 1861, matriculated at La Grange Military Academy. The institution was chartered by the Legislature of Alabama as La Grange College in 1830 and was located in Franklin County (now Colbert County). The college was a literary school until 1857 when the military feature was introduced. Young Wyeth's college career ended in December, 1861 after only one year of training.

The state had seceded and the Southern Confederacy had been organized during his year at college. Because some of his friends had enlisted, young Wyeth wanted to also. His parents persuaded him to stay at home because of his small stature and because they wished him to work on the farm. When his father enlisted and went to the front, John Allan planted and tended 10 acres of corn, but by December, 1862, he had decided that farming was not going to be his life work.

After consultation with his parents, John Allan decided to join one of the cavalry companies from his county. It was Company I which was part of the Fourth Alabama Cavalry and he enrolled early in April, 1863, joining the command then doing outpost duty near Eagleville, Tennessee. He took part in numerous engagements and the following serve to illustrate where his command was active: Shelbyville, Tennessee, June 27, 1863: Morris' Ford, Elk River and Winchester, July 2nd: Chickamauga, September 18-21: capture of General Rosecran's great supply train in Sequatchie Valley, October 2, 1863. John Allan was taken prisoner on October 4, 1863 and confined at Camp Morton, Indiana until exchanged in April, 1865.

The arduous trip to the prison was almost too much for John Allan. During a two day stay at the Tennessee State penitentiary, he contracted a cold which developed into pneumonia a few days after he arrived at Camp Morton. He had hardly recovered from this sickness when he became ill with measles. This combination of illnesses kept him in the hospital for the first three months of his prison life. In February, 1865, he was included in a group of five hundred "hopeless invalids" that was called off parole to be sent to the south.

With one year of college training and five years of mixed experiences including fifteen months of prison life, John Allan entered the freshman medical class of the University of Louisville in the fall of 1867. There were no entrance examinations, and the requirements for graduation were a satisfactory examination at the end of two college terms of seven months each. The curriculum included anatomy, chemistry, physiology, materia medica, medicine, surgery, and obstetrics.

The teaching of most of the courses was largely didactic, but the anatomy course was supplemented by good work in the dissecting room. The teaching of obstetrics was entirely didactic. Wyeth did not enter the ward of a hospital or receive instruction by the bedside of a patient during the two years' course.

At a **public** commencement on March 2, 1869, the degree of Doctor of Medicine was conferred upon John Allan Wyeth. The same month Dr. Wyeth returned to Guntersville and opened an office. He wrote that "it was the irony of fate that my first call was obstetrical." However, it was a normal delivery and his chief duties were tying and cutting the umbilical cord.

He was quite successful with his first cases, but a case of diabetes mellitus which progressed to a fatal termination was too much for him.

Dr. Wyeth felt that he was unfit to take the responsibility of the life, health and happiness of those who might be willing to place themselves in his care. He knew that he needed clinical and laboratory training under experienced teachers, and he decided to close his office and give up his practice until he could secure such training. That night, two months after he had tacked up his sign, he took it down and made plans for post-graduate study.

On arriving in New York, he discovered that there were no special courses offered to graduates in medicine. After surveying the three medical schools in New York City, he selected Bellevue Hospital Medical College and matriculated on October 16, 1872. He attended lectures in medicine, surgery, and obstetrics and graduated on March 1, 1873 with the *ad eundem* degree. Much of his time was spent in the dissecting room and in the surgery clinics.

He became assistant demonstrator of anatomy in 1873, and in 1874 he was appointed prosecutor to the chair of anatomy, a post he held until 1878. In 1875, he began the study of pathology with Dr. E. G. Janeway. Because of his interest in both his new association and in the special field of study, he joined the New York Pathological Society which offered him ample opportunity to meet with the leading pathologists. And he had the honor of being president of this society for two terms, 1895-1897.

Professor Stephen Smith in a clinic at Bellevue Hospital called attention to the fact that in Syme's amputation at the ankle, there frequently occurred a sloughing of the posterior flap. Dr. Wyeth immediately set out to discover the cause of dissected 87 ankle-joints and their blood-vessels which resulted in an "Essay upon the Surgical Anatomy of the Tibio-tarsal Region with Special Regard to Amputations at the Ankle-joint." In 1876, this essay won the annual prize of one hundred dollars for the Alumni of his new alma mater.

At the same time, be began his study of the ligation of the external carotid artery and these included investigations on the innominate and subclavian arteries. These series of experiments were included in an essay which was offered in competition for one of the two prizes to be given by the American Medical Association (AMA) in 1878. The committee elected to divide the paper and awarded Wyeth both prizes as follows: first prize, "The Surgical Anatomy and Surgery of the Carotid Arteries" and second prize, "Surgical Anatomy and Surgery of the Innominate and Subclavian Arteries."

Wyeth visited Europe in 1878 in order to study the methods of teaching in the great medical centers of London, Paris, and Berlin. He had been planning a new system of medical education in America and this prompted him to make the survey. So in 1881, Wyeth founded the New York Polyclinic Medical School and Hospital, the first postgraduate medical school in America. He became Professor of Surgery and Surgeon in Chief and later on president of the institution.

Wyeth made the acquaintance of the renowned Dr. J. Marion Sims in 1877 and visited in his Paris home the next year. Sims had become famous while practicing at Montgomery, Alabama, and had known Wyeth's father who as a young man had been in the Alabama Legislature. The warm friendship which developed continued until Sims' death in 1883.

In 1886, Wyeth married Florence Nightingale Sims, daughter of Dr. Sims and three children were born to this union.

In 1889, Wyeth reported his work on the "Bloodless Amputation at the Shoulder Joint," and in 1890 at the annual meeting of the AMA, he reported his studies on "Bloodless Amputation at the Hip-Joint."

At the 1893 meeting of the AMA, Wyeth was elected first vice-president. Eight years later he was elected president. It was at this meeting that he gave the "Oration on Surgery." He delivered the presidential address at the 53rd annual session of the AMA, in 1902.

Honors continued to come and Wyeth was elected President of the New York Academy of Medicine in 1906 to serve for two years. He was re-elected in 1908. While serving the first term in the presidency of the Academy he was elected President of the New York Southern Society in 1907. He was re-elected in 1908. It was while he was active in the Southern Society that he met Woodrow Wilson, a Virginian and President of Princeton University. Wyeth arranged a

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John Allan Wyeth

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meeting of some prominent democrats in 1907 to discuss the possibility of Wilson entering the race for President of the United States, but Wilson declined at that time. However, Wyeth was chairman of the medical group of the campaign which resulted in Wilson's election in 1912.

Wyeth received many other honors during his long and useful life. He was president of the Hospital Alliance of Greater New York. He was honored by membership in the Northwestern Medical and Surgical Society. The legislature of Alabama gave Wyeth and J. Marion Sims a vote of appreciation jointly. The University of Alabama conferred the honory degree, Doctor of Laws, on Wyeth in 1902 and in 1909, the same degree was conferred by the University of Maryland.

Wyeth was a prolific writer and he not only wrote papers about his research, but his literary efforts also included a wide variety of subjects such as a textbook, biography, autobiography, history and poetry. His scientific writings include at least 75 separate papers.

His list of titles embrace a great many subjects of which the following may serve as examples: sarcomas; removal of tumor of spermatic cord; selection of anesthetic; technique of appendectomy; fractures and burns; skin grafting, and surgery of bones. He wrote three books and his textbook of surgery, general, operative, and mechanical passed through several editions. His autobiography, *With Sabre and Scalpel,* 1914, includes twelve of his poems. His book on the *Life of Lieutenant-General Nathan Bedford Forrest,* 1899, received wide acclaim.

Dr. Wyeth was six feet tall, had piercing blue eyes, and brown hair. He was quite energetic, but in later years always planned a rest period during the day. He rose early, wrote, made ward rounds and often operated before having breakfast at home at 8:00 or 8:30.

He died suddenly of heart disease on May 8, 1922, and with him passed one of America's pioneers, a great surgeon. He originated techniques that have been extremely helpful in the relief of human pain and suffering, as well as improved and devised corrective surgical methods. A bronze statue of Dr. Wyeth stand on the capital grounds in Montgomery at the right o the walk as one faces the front of the capital build ing.

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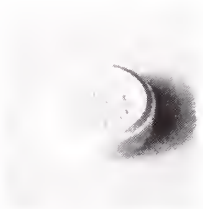
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Medical Association of the State of Alabama

VOLUME 45, NUMBER 5 NOVEMBER 1975

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price $12.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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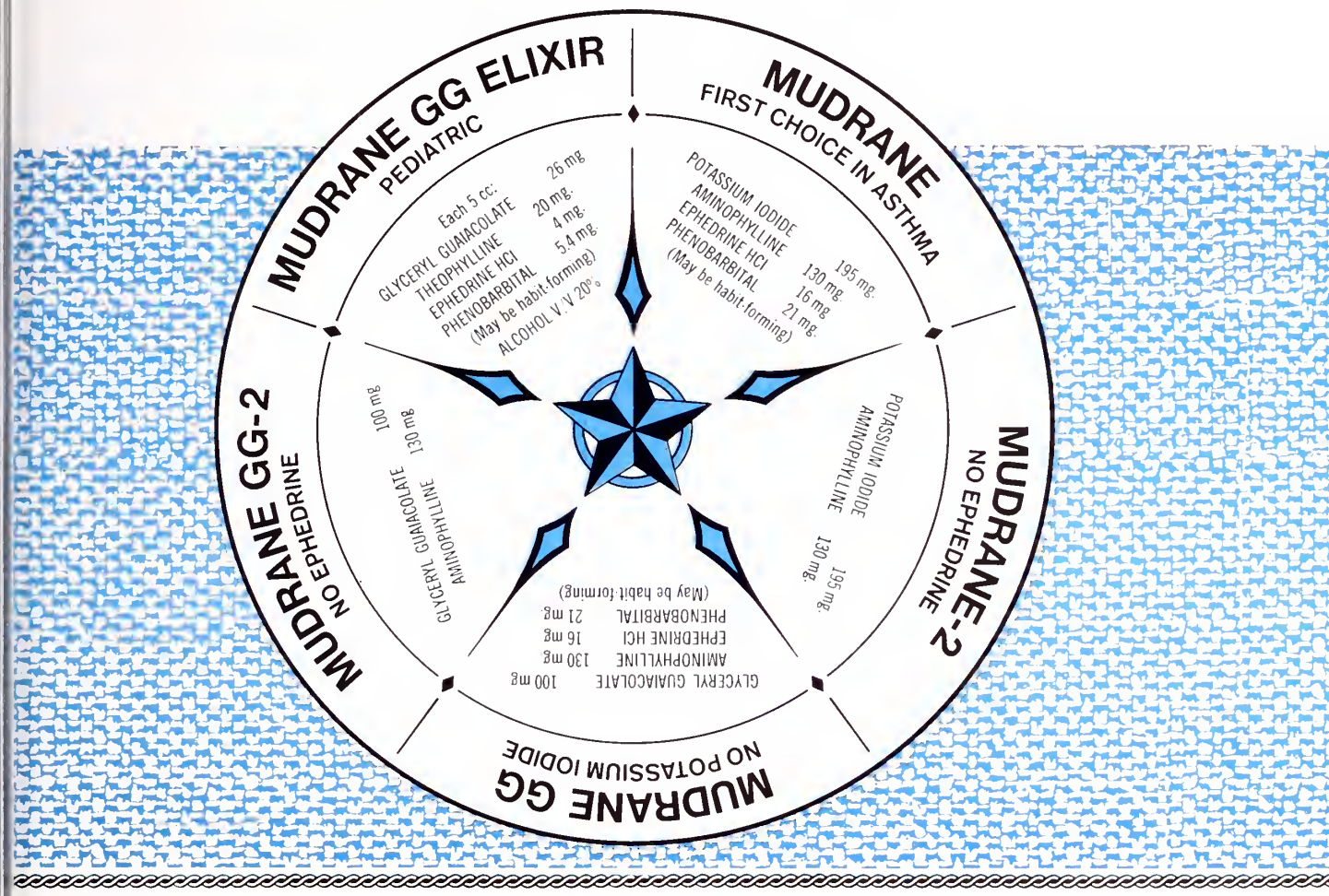
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Unless there is a sudden upsurge of crushing problems, the 1976 Annual Session of MASA should provide a great deal more time for relaxation and renewing old friendships than has been possible in the past decade or so.

The new Constitution and Bylaws provide for a January caucus of Counsellors and Delegates in each Congressional District. Each District Censor (there are seven; the remaining five Censors are elected at-large) has already scheduled the day for his caucus, either in late January or early February.

One of the duties of the District caucus will be to make nominations for vacancies in the College of Counsellors. Hitherto, this has been done under most adverse conditions and confusion in the few minutes separating the Scientific Session from the annual ALAPAC luncheon on Friday of the Annual Session. The new system will give Counsellors and Delegates more time to consider their choices of nominees.

The caucuses also are expected to consider nominations for other offices to be filled at the Annual Session in April. These will include a President-Elect, two delegates and two alternate delegates to AMA, one at-large member of the Board of Censors, and a Vice President.

The Counsellors and Delegates' caucuses also will consider available reports of officers, councils and committees, and may, on their own volition, refer subjects to the several Reference Committees which will be seated at the Annual Session.

Actions of the District caucuses along with all other reports will be published in a Handbook for Counsellors and Delegates as in years past.

There is one day that is ours. There is one day when all we Americans who are not self-made go back to the old home to eat saleratus biscuits and marvel how much nearer to the porch the old pump looks than it used to. . . Thanksgiving Day . . . is the one day that is purely American. —O. Henry



A Physician's Prayer

Our Heavenly Father. . . . .

For this Land, we give Thee thanks;
For this People, we give Thee thanks;
For this calling which is ours, we give Thee thanks.

May we, Thy servants, find peace within,
Amidst the storms without;
To serve this People of this great Land,
We give Thee humble thanks.

. . . . . Amen

Charles L. Putzel, Jr., M.D.
Selma, Alabama

Thanksgiving

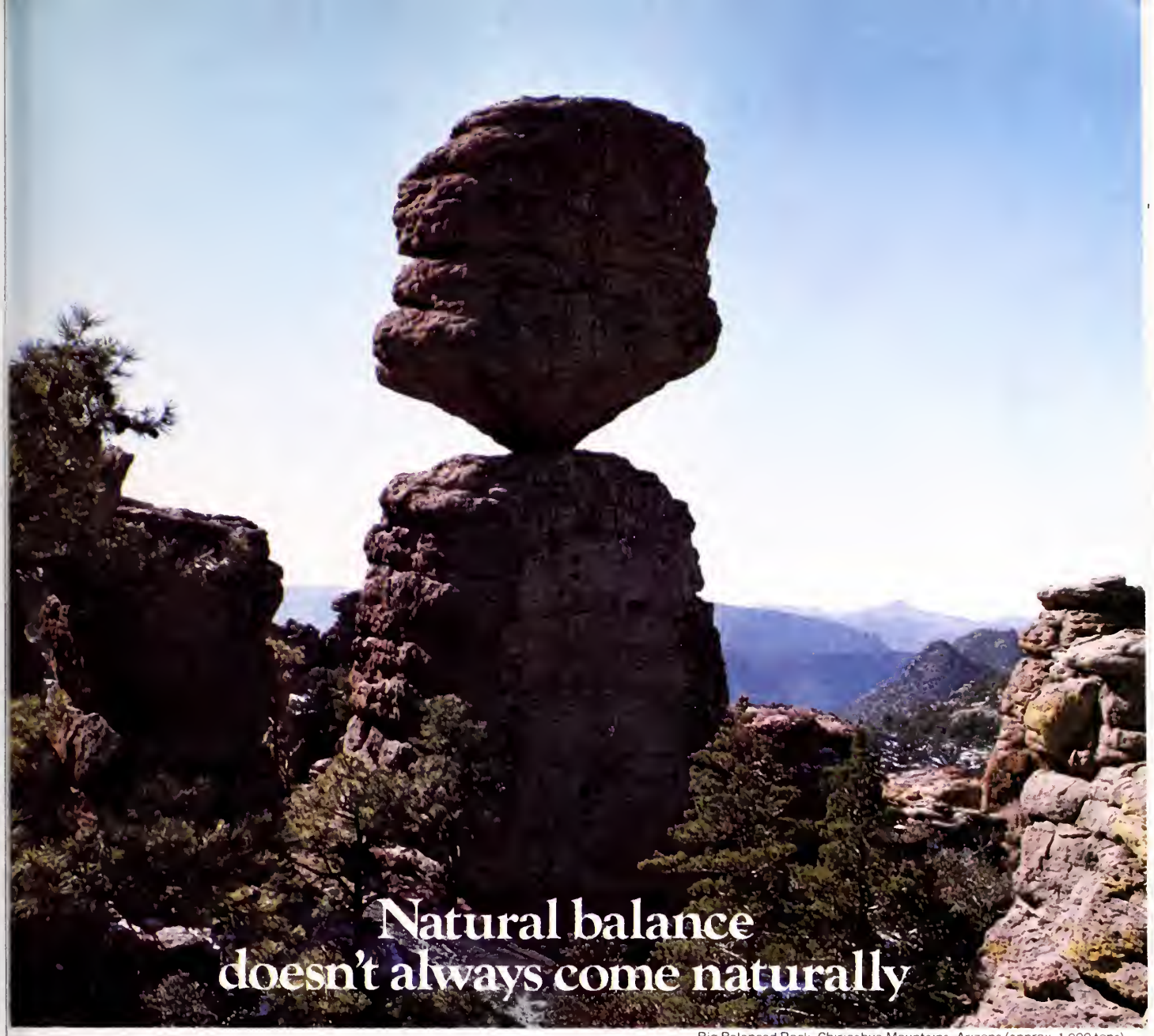
The national observance of Thanksgiving has been a part of our American heritage ever since the Pilgrim's first celebration in 1621. Through the years, this holiday has held forth a variance of special meanings to many Americans.

For some, it is a time of family reunions, a renewal of friendships and old acquaintances. For others, a period of rest from busy work schedules for a long-awaited refreshing of spirit and mind.

A reflective glance back down the corridors of time reminds us again of the true meaning of Thanksgiving as celebrated by Gov. William Bradford and those early colonists.

The Massachusetts Bay Colony had yet to feel the full force of winter. Adequate medical supplies were few, if non-existant. The ship's surgeon, who commonly applied his trade as barber and sometimes as blacksmith, filled the demanding role of physician to the colony. Their times were difficult and more perished in that first cold winter than lived.

At this time of Thanksgiving, particularly with national focus upon our Bicentennial, we should be ever mindful of our great medical heritage and its impact upon our lives today. Those early meager efforts, bolstered in later years by new advances in techniques and equipment, have produced the greatest system of medical care the world has ever known. For this, we are thankful.



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

□ Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
□ Can relieve nausea and vomiting often associated with vertigo.*
□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
□ Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
□ Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

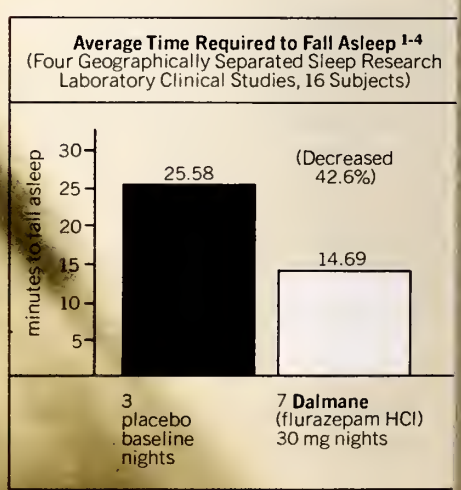
ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

How do you handle trouble falling asleep?

With Dalmane® (flurazepam HCl), results are highly predictable.

As demonstrated below, Dalmane induces sleep within 17 minutes, on average:[1-4]



And for those with trouble staying asleep or sleeping long enough...

...sleep research laboratory clinical studies prove: Dalmane decreases number of nighttime awakenings and increases total sleep time.[5]

Dalmane (flurazepam HCl) is relatively safe, seldom causes morning "hang-over"

Dalmane is generally well tolerated. The usual adult dose of 30 mg should initially be lowered to 15 mg for the elderly and debilitated, to help preclude oversedation, dizziness or ataxia. Appraisal of possible risks is suggested before prescribing.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th annual Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971
3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
5. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

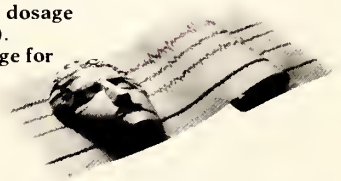
Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

You can depend on the efficacy of

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.



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- **sleep within 17 minutes, on average**
- **sleep with fewer nighttime awakenings**
- **sleep for 7 to 8 hours, on average, with a single *h.s.* dose**

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Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the



Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

main purpose of drug information for the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeling must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the information is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

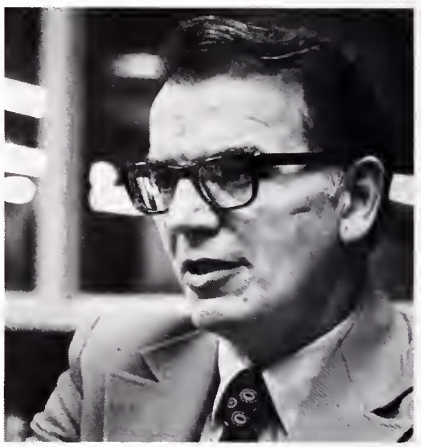
I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A

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Mr. Kenneth A. Howd
Distribution Center Manager
B. F. Goodrich
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B. F. Goodrich in Birmingham is a service organization distributing tires, hose, belting, and matting in 13 southeastern states. Telephone communications is the heart of their operation. And Bell was there to help when they needed help the most. Let Mr. Howd tell you:

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Hawaii Will Be Interesting!



E. Vernon Stabler, Sr., M.D.

The winter trip of the Medical Association of the State of Alabama will be to Hawaii; this coincides with the meeting of the American Medical Association. It's selection for our annual winter, MASA-sponsored "travel together" has important possibilities for the doctors of Alabama.

I need not dwell on the fabulous fun, frolic and family outing in the 50th State. Her multiple attractions are known, and beckon to all of us – to those who have never been, "dreams of a vacation land acute and calling" – to those who have been, "fond memories alluring and calling again."

There are other very important opportunities in this trip for every doctor who goes. The clinical meeting of the AMA will be in full swing; credits for Continuing Education can be gained; new knowledge can be attained scientifically and many old friendships renewed.

Ample time is available for all things; so let us leave the practice of medicine in Alabama to the "home fire keepers" – or the "unfortunates" who must stay – and then let the most of us go to make up the "very fortunates" for one week.

The Hawaiian trip presents a wonderful opportunity for each Alabama doctor to see the action and function of the business end of the AMA, something taken advantage of, or participated in, by very few members of MASA.

We have three delegates and three alternates, in addition to your elected officials, to wit, the President and President-Elect of MASA. The Executive Director of MASA will also be there representing us and active in arrangements.

Each morning at 7:00 o'clock, the above group will meet in caucus and assign one person to cover each Reference Committee of the AMA meeting. The Reference Committee comprises the basic working of AMA. At our local caucus, we will discuss each action, decide on what MASA's position will be and what we will support or oppose. Each assigned member will then carry this message to the Reference Committee.

We plan to have our caucus open for all Alabama doctors to attend. In addition to attending our caucus, you may attend any Reference Committee as a participating guest. You may also attend the formal AMA House Delegates' meeting as a guest, but not as a participant.

The business action will be away from the scientific meetings and the exhibits. If you have never seen the "behind the scene" functioning of the large organization, please take advantage of this golden opportunity.

ALOHA. ■

E. V. Stabler

Thanks to Barbara Owen, filing a claim with Blue Cross is almost effortless.



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Before going out into the field, Barbara worked in every department Blue Cross has. As do all professional relations people. So, when you've got a question, chances are they'll know the answer. Or where to find it. Quick.

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editorials editorials

Survey Tells The Story

Cost factors have reared their ugly heads again along this country's path toward National Health Insurance (NHI), a sight becoming evermore familiar to our national representatives.

Currently before Congress is the Long-Ribicoff catastrophic health insurance bill (see October issue of *Journal,* Vol. 45, No. 4, p. 11). The major issue is whether or not this program should be part of NHI. Figures from a study made by the General Accounting Office (GAO) comparing the SSA's Bureau of Health Insurance performance and cost for 1973 with that of several contract intermediaries may provide a possible answer.

The GAO report found that private health insurance organizations do a better and cheaper job of handling Medicare bills than the SSA. The average cost, excluding audit, of a bill processed by SSA was $12.39 compared to $7.31 for Travelers, $7.28 for Mutual of Omaha, $3.81 for Chicago Blue Cross Plan and $3.55 for the Maryland Blue Cross Plan. Alabama Blue Cross-Blue Shield ranks among the lowest with a $3.84 cost factor according to recent SSA figures for the period July, 1974 through June, 1975. Allowing for an inflationary increase to the 1973 figures, these SSA costs are way out of line.

High Federal pay and administrative inefficiencies are to blame for Social Security's poor showing in the comparison. Even so, it is bureaucratic abominations such as these which must be dispensed with before more plans can be made to inflict any sort of national insurance program on this country.

A Change Of Heart

In July, the House of Representatives passed a manpower bill that requires students in the health professions to pay back in dollars or in service the subsidies the Federal government gives to their schools.

The capitation-payback requirement was the most controversial part of the Health Manpower Act of 1975. Concessions were made, amendments defeated and now the bill stands before the Senate Subcommittee on Health, chaired by Sen. Kennedy (D.-Mass.).

Well publicized, the Kennedy stance leans toward even greater Federal regulation of medical education than House supporters of the Act intended. He has publicly stated that he favors a measure which would include not only similar payback provisions, but also mandatory service for all medical students, residency-regulation provisions and Federally supervised licensure and relicensure of physicians.

Now comes HEW's new health manpower proposal, more moderate in tempo, opposing mandatory residency regulations and prepared so that medical students have some freedom in choosing to serve medically underserved populations. Sen. Kennedy, in a most unusual display of cordiality, has embraced HEW's proposal and now states that he intended to introduce the bill once its drafting had been completed.

The truth of the matter is that the self-professed "consumer advocate" of the U.S. Senate is now fence-straddling. Will the real Ted Kennedy please stand up?

The HSA Muddle

A roomful of representatives of the Alabama Regional Medical Program's Regional Advisory Council, the Advisory Council to the Comprehensive Health Planning Agency, and the Directors of the 314 (b) Agencies in Alabama met in Montgomery October 31 to bake a pie. By meeting's end they had eaten it.

The purpose of the meeting was to lay final groundwork for the State's six Health Systems Agencies which will determine the where, wherefores and whereases of health systems in this State in the years to come. The cost of these programs has been set at $1,774,449 for the first year.

Most of the votes cast at the meeting were designed to ensconce the voters in highly lucrative positions. Each was voting on the others' future employment.

Unlike many other states where the organization of Health Systems Agencies is being hotly contested by a plentitude of agencies anxious to fulfill the responsibilities of Public Law 93-641, there were only six applications for the entire State of Alabama (excluding Russell County, which has been ceded to Georgia under this program). Actually, what we now have is an amalgamation with essentially the same personnel of the Comprehensive Health Planning and Regional Medical Program components.

Granted that the Health Systems Agencies' establishment will enjoy a smoother transition than in some states since all concerned have already been engaged, more or less, in the activities of HSA, one has reason to question whether such a wholesale assumption of authority could have been accomplished without a great deal of backroom planning.

One topic of discussion was salaries to be paid to the new HSA leadership. It should be noted that four of the six self-selected Executive Directors of HSAs will receive more

CONTINUED ON PAGE 14

CONTINUED FROM PAGE 13

compensation that the Governor and five of the six will be paid more than the Mayor of the City of Montgomery. And this does not include a built-in 18 per cent for fringe benefits.

It would appear that another boondoggle is a contract to reimburse Auburn University $24,410 per year for bookkeeping services to just one of the HSA organizations.

An examination of the slots to be filled for each governing body quickly indicates that physicians around the State have taken part at the local level and have been instrumental in securing physician input on the Boards of these agencies. However, pharmacists, dentists and nurses were not as well represented, and in many instances will have to share their influence or positions on the Boards and Executive Committees with other well known "health providers" such as health insurance salesmen, etc.

All in all, the day's activities were most expeditiously completed and the non-profit organizations making application can be congratulated for doing an outstanding job in securing their territory and their new high salaried positions. It is hoped that these individuals will work as hard in pursuing realistic health plans for the State of Alabama.

GUEST EDITORIAL

Excessive Fees: A Nagging Problem

The Medical Society of Mobile County is constantly getting calls from patients. Most of these calls, as one would guess, are complaints covering a variety of dissatisfactions. In many instances, they are either settled with conversation or explanation.

Excessively high fees are difficult to explain. What makes the services of one physician so much more than another is difficult to understand, and we must admit that they often have a valid complaint.

We can extoll the great virtues of our American medicine and feel ourselves that it has no peer, but the enemies of our system are waiting in the wings to make the big change. The system is being jeopardized by the poor judgment that a few physicians are using in charging fees that could not be justified either by the quantity or quality of the service rendered.

State medical societies are powerless to combat these excesses unless a formal written complaint is received. Too many dissatisfied patients pay the charges, but do not forget. Medicine is rapidly approaching the time when we will need all the friends we can get.

Excessive fees are losing us the support of patients and provoking the wrath of the government. It would be extremely interesting to see the consequences of a voluntary cut in fees by all physicians. The public support we would probably gain would be worth the loss of income.

Jack Ilyman, M.D.
President
Medical Society of Mobile County

Physician Public Relations

There have been countless definitions applied to the term "public relations", many of them by persons regarded as experts in the field itself. None is totally acceptable as a complete definition. Even when the layman attempts to define the term, he oft times becomes entangled in generalities or snagged in specifics.

For simplicity's sake, public relations may be characterized as the cultivation of a favorable attitude towards a particular enterprise. Correctly and effectively applied, public relations is neither a confidence game nor a bag of tricks for misleading people to one's own self-advantage.

The AMA's new media relations book "You, Too, Can Have A Good Media Relations Program" succintly defines public relations as "mutual trust." Merriam-Webster offers this definition: "The art or science of developing reciprocal understanding and good will between a person, firm or institution and the public."

Whether or not physicians individually profess to be well versed in the art of public relations, they are involved daily with people from all walks of life, merely as a result of their professional calling. It may be the patient in the office or hospital, office personnel or fellow members at the local medical society meeting.

Additionally, physicians have opportunities today as never before to communicate with the public at large, particularly through the media of newspaper, television and radio. Frequently (and unfortunately), physicians and journalists or broadcasters do not know enough about each other's problems, methodologies and ideas. Civic and school organizations are constantly searching for attractive programs and informative speakers. Public speaking is an avenue which has not been well traveled by the medical profession, but is an invaluable vehicle for disseminating the message of organized medicine. The MASA-sponsored "Physician for the Day" program in the State Legislature has been well supported in the past by participating physicians who find this a golden means of sharing and learning with State legislators.

It is urgent that organized medicine communicate with all citizens in as many ways as possible. Every physician can do a great deal to encourage a "mutual trust" with the public, to help clear away the storm clouds of misunderstanding breeded by lack of knowledge.

Communication is the name of the game. "Mutual trust" is something sought and achieved, not something inherited. The starting point begins with the individual physician. County medical societies and the Association have the tools necessary to begin the job. "The fields are white unto harvest."■

Mobile School To Confer Degrees

Four medical schools will grant degrees for the first time next spring, bringing the number of degree-granting medical schools in the United States to a record 111.

The schools are the University of South Alabama, Mayo Medical School, University of North Dakota and Eastern Virginia Medical School. ■

Letters to the Editor

Comments On August Editorial

The guest editorial by Drs. William F. Bridgers and S. Richardson Hill in the August, 1975 issue of the *Journal* is an excellent analysis of Alabama's problems and some potential solutions in terms of primary health manpower and their location within the State.

There are some comments that I believe can be added concerning this situation. It is obvious that unless new efforts are undertaken to influence practice and location decision-making, the current geographic and specialty maldistribution problems will be more serious. This is not only possible, but quite probable.

Dr. Bridgers has referred to the 1156 net increase in the number of licensed physicians with Alabama addresses from 1966 – 1975. 83% of these located in Jefferson, Mobile, Madison, Montgomery and Tuscaloosa Counties. Unless efforts are made by a number of individuals and institutions to correct this, the situation will continue to exist and will, in fact, probably be accentuated.

Dr. Bridgers, in his article, also pointed out that there needed to be an increase in the effectiveness of our physicians. He delineated that the increase in effectiveness should take the form of altering the mix and location of physicians. I would only add that there are other methods of increasing the effectiveness of physicians, some of which he delineated in subsequent paragraphs. Such efforts will require the support of practicing physicians in the community.

One of the keys Dr. Bridgers has correctly identified is that additional residency opportunities in additional locations must be made available as rapidly as possible. A recent article in the *Journal of the American Medical Association* stated that 50% of medical students locate in states where they went to medical school and 75% of students located in states where they did their residency.

In a recent memorandum, Dr. Robert Graham, American Academy of Family Practice, examining the first 567 graduates of the Family Practice Residency Programs nationwide, demonstrates that 60% of those graduating residents locate in communities with less than 30,000 populations and that 25% of those graduates located in communities with 5,000-15,000 population. This, to me, implies a very firm marching order to develop additional Family Practice Residency opportunities in those sites that have the physical capability for initiating these programs.

I think it is clear that this will take resources. Preliminary estimate of the cost to develop a residency program in one of the communities identified by Drs. Bridgers and Hill, even making maximum use of voluntary faculty, would be over $300,000 per year.

In addition, efforts must be expended so that the current 540 house officers are not required to receive a portion of their training in rural communities. While this represents tremendous logistic problems, they must be surmounted in order to meet the challenges that Dr. Bridgers has clearly delineated.

There is currently some difficulty in establishing in the minds of many individuals that medical manpower does not automatically translate to service. Preferably people, when they ask for physicians to locate in their community, are really asking for medical services and it has to be recognized that there are other inputs other than manpower itself which are necessary to provide medical services.

There is, however, another dimension that needs to be considered. In studies by this author and Dr. Dale Champion on physician location decision-making, it has been shown that the two major concerns about practice location center around educational opportunities for physician's children and cultural and social advantages for the spouse. Communities must recognize their need to improve those aspects to assure that adequate educational opportunities, cultural and social opportunities are available. It is not only medical education's responsibility, but also the responsibility of those who are anxious to attract medical service to their communities.

F. Douglas Scutchfield, M.D.
Associate Dean
College of Community Health Sciences
Tuscaloosa

Regional Plastic Surgeons

I am enclosing a copy of a letter published in Postgraduate Medicine written by Dr. Trent Smith, immediate past president of the American Academy of Facial Plastic and Reconstructive Surgery. I feel that his letter has special significance in that it points out the overlapping interests of various specialties in performing plastic surgery.

E. Gaylon McCullough, M.D.
Birmingham

To the Editor:

At a time when federal agencies and hospitals are especially concerned with definitions, privileges, and capabilities, it behooves an enlightened medical profession to reflect on who's who in the growing field of plastic surgery. We tend to rely on semantics and impressions. That tendency is fine, but in following it, we fail to recognize the many practitioners of plastic surgery who do not use the title "plastic surgeon."

Basically, plastic surgery is both a method and a medical specialty. In effect, the plastic surgeon is a specialist in the method. He is obviously a practitioner of plastic surgery and is certified by the American Board of Plastic Surgery.

Who, then, are the other practitioners of plastic surgery? They are specialists in a particular region or organ of the

body, for example, ophthalmologists, who after certification by the medical board in their specialty, subspecialize in plastic and reconstructive surgery. Thus, during their specialty training, they master both the specialty region and the method of ophthalmic plastic surgery. Some of these specialists have become known as regional plastic surgeons.

Unlike general plastic surgeons, regional plastic surgeons do not present a consistent identity pattern. Some otolaryngologists may practice under the title "head and neck plastic surgeon" or "cosmetic facial surgeon." Other regional specialists may add the term "plastic surgeon" to their specialty title, for example, the ophthalmic plastic surgeon and the dermatologic plastic surgeon. Still others, such as orthopedists, obstetrician-gynecologists, urologists, neurosurgeons, colon and rectal surgeons, and general surgeons, do not usually add the term "plastic" to their specialty title, although they may use plastic and reconstructive surgical techniques.

About 180 maxillofacial surgeons spend all their time doing plastic and reconstructive surgery. Virtually all of the neurosurgeons, estimated at 2,000, perform cranioplasties for skull defects. Most of the 9,200 orthopedists practice plastic and reconstructive surgery, because that in the broadest sense is the nature of their work. Many of the 6,000 urologists do some plastic reconstructive surgery in their specialty area, as do many of the 30,000 general surgeons who apply plastic techniques in repairing hernias, strengthening the abdominal wall, removing tumors and ulcers, working with or operating burn units, and repairing defects with skin grafts.

Conservative estimates from the most pertinent medical specialties suggest that about 22,000 American physicians practice regional plastic surgery. Of that total, more than 7,000 perform plastic and reconstructive surgery in the head and neck area alone. The significance of these numbers is seen when they are compared with the number of specialists, an estimated 1,500, who are designated plastic surgeons.

Obviously, no medical specialty has the exclusive capability to perform plastic and reconstructive surgery. No board certification by any specialty and no medical title can guarantee a fine surgical result. In discussing plastic surgery with our patients, we might well remember that there are good, fair, and poor surgeons in all specialties. The most important consideration, therefore, is not the surgeon's title, but his ability as manifested by his results.

Trent W. Smith, M.D.
Columbus, Ohio

FINISH THE DAY

Finish the day and be done with it. You have done what you could. Some blunders and absurdities no doubt crept in – forget them as soon as you can, tomorrow is a new day; begin it well and serenely; and with too high a spirit to be encumbered with your old nonsense.

Ralph Waldo Emerson

BUMPER STICKER: "If you like the way your postal service works, you'll love national health insurance."

IMPORTANT INFORMATION: *This is a Schedule V substance by Federal law; diphenoxylate HCl is chemically related to meperidine. In case of overdosage or individual hypersensitivity, reactions similar to those after meperidine or morphine overdosage may occur; treatment is similar to that for meperidine or morphine intoxication (prolonged and careful monitoring). Respiratory depression may recur in spite of an initial response to Nalline® (nalorphine HCl) or Narcan® (naloxone HCl) or may be evidenced as late as 30 hours after ingestion. LOMOTIL IS NOT AN INNOCUOUS DRUG AND DOSAGE RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO, ESPECIALLY IN CHILDREN. THIS MEDICATION SHOULD BE KEPT OUT OF REACH OF CHILDREN.*

Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

Contraindications: In children less than 2 years, due to the decreased safety margin in younger age groups, and in patients who are jaundiced or hypersensitive to diphenoxylate HCl or atropine.

Warnings: Use with special caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis. In severe dehydration or electrolyte imbalance, withhold Lomotil until corrective therapy has been initiated.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

Precautions: Addiction (dependency) to diphenoxylate HCl is theoretically possible at high dosage. Do not exceed recommended dosages. Administer with caution to patients receiving addicting drugs or known to be addiction prone or having a history of drug abuse. The subtherapeutic amount of atropine is added to discourage deliberate overdosage; strictly observe contraindications, warnings and precautions for atropine; use with caution in children since signs of atropinism may occur even with the recommended dosage. Use with care in patients with acute ulcerative colitis and discontinue use if abdominal distention or other symptoms develop.

Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing, hyperthermia, tachycardia and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria, paralytic ileus, and toxic megacolon.

Dosage and administration: ***Lomotil is contraindicated in children less than 2 years old.*** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

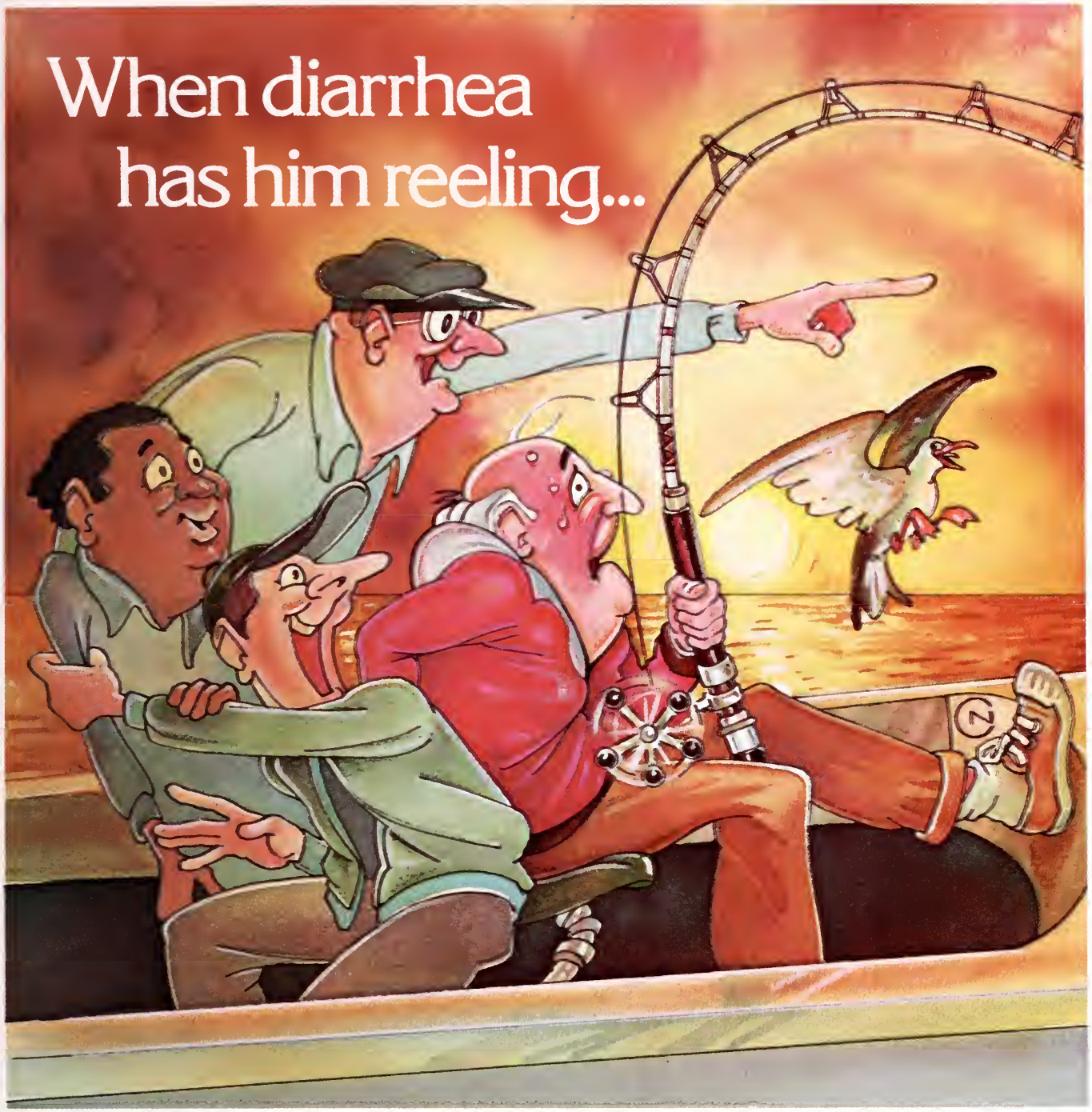
Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, hyperthermia, tachycardia, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. A narcotic antagonist may be used in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. Liquid, 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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San Juan, Puerto Rico 00936

Address medical inquiries to:
G. D. Searle & Co.
Medical Department, Box 5110,
Chicago, Illinois 60680

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Diarrhea can hook anyone. When it does, physicians and patients both want prompt control of diarrheal symptoms. Lomotil will usually control diarrhea promptly.

This rapid action can halt the emergency aspect of diarrhea and is comforting and reassuring to the patient. Electrolyte and fluid losses can be corrected while the specific cause of the diarrhea is being determined. If an infective agent is the cause, appropriate specific therapy should be given along with Lomotil.

Lomotil is contraindicated in children less than 2 years old.

Lomotil®

TABLETS LIQUID

Each tablet and each 5 ml of liquid contain diphenoxylate hydrochloride 2.5 mg (Warning: May be habit forming), atropine sulfate 0.025 mg

holds the line.

In hypertension,
ALDOMET® (METHYLDOPA|MSD)
usually offers more than effective lowering of blood pressure...

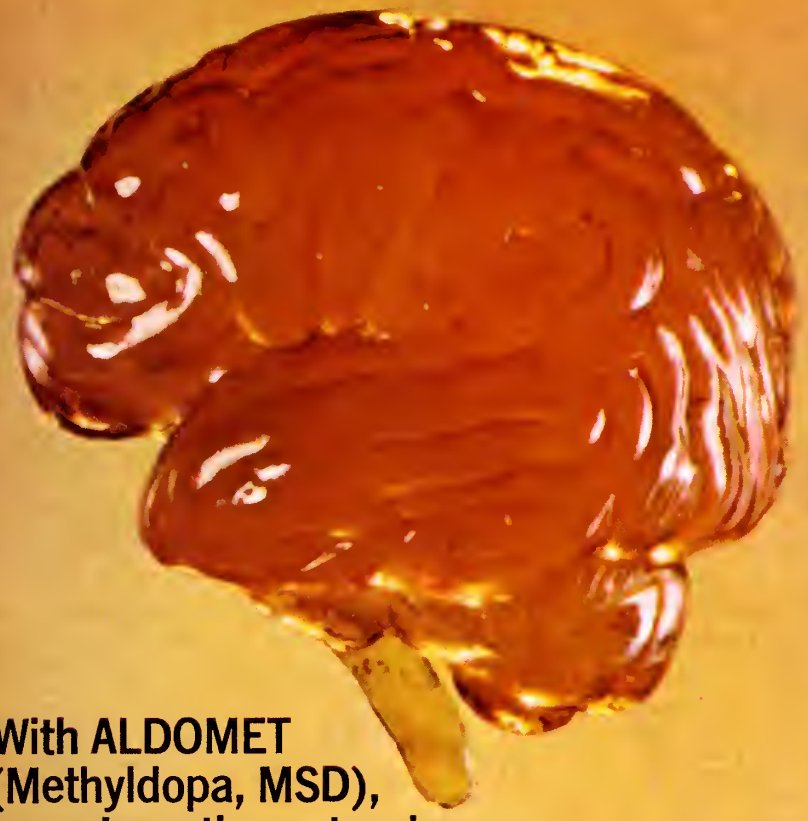


With ALDOMET (Methyldopa, MSD), existing renal function is usually unchanged

ALDOMET has no direct effect on renal function. When used in effective doses, ALDOMET usually does not reduce glomerular filtration rate, renal blood flow, or filtration fraction.

With ALDOMET (Methyldopa, MSD), cardiac output is generally unchanged

ALDOMET has no direct effect on cardiac function. When ALDOMET is used in effective doses cardiac output is usually maintained with no cardiac acceleration; in some patients the heart rate is slowed.



With ALDOMET (Methyldopa, MSD), symptomatic postural hypotension is infrequent

ALDOMET reduces both supine and standing blood pressure. Less frequent symptomatic postural hypotension is experienced with ALDOMET than with many other antihypertensive agents. Exercise hypotension and diurnal blood pressure variations rarely occur.

for hypertension

TABLETS, 250 mg, 500 mg, and 125 mg

ALDOMET®

(METHYLDOPA|MSD)

a unique antihypertensive agent

ALDOMET is contraindicated in active hepatic disease, hypersensitivity to the drug, and if previous methyldopa therapy has been associated with liver disorders. It is not recommended in pheochromocytoma.

It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. For more details see the brief summary of prescribing information.

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For a brief summary of prescribing information, please see following page.

addendum

MSD
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to further simplify therapy for many patients

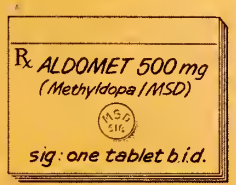
now available ALDOMET® 500 mg (METHYLDOPA|MSD)

- **often more practical to prescribe**
- **easier for patients to remember**

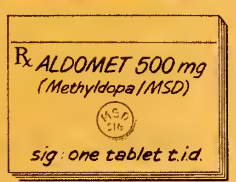
Now offered in addition to the standard 250-mg tablet, the new ALDOMET 500 mg tablet is a patient convenience. An especially important one, since in hypertension convenience of the dosage schedule is one factor that can make the difference in compliance of the patient. The minimum daily dose of ALDOMET is 250 mg b.i.d. The usual starting dose is 250 mg t.i.d. Dosage is adjusted as necessary by adding or deleting 250 mg or 500 mg at intervals of not less than two days. The maximum dose is 3.0 g per day.

Examples of b.i.d. or t.i.d. dosage convenience provided by ALDOMET 500 mg within the usual daily dosage range of 500 mg to 2.0 g:

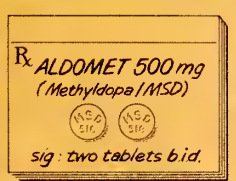
1.0-g daily dose =

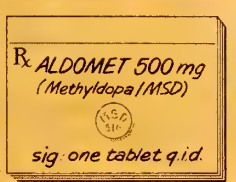


1.5-g daily dose =



2.0-g daily dose =





NOTE: Tablets shown are not actual size.

in hypertension

ALDOMET® (METHYLDOPA|MSD)

usually lowers blood pressure effectively



Contraindications: Active hepatic disease, such as acute hepatitis and active cirrhosis; if previous methyldopa therapy has been associated with liver disorders (see Warnings); hypersensitivity.

Warnings: It is important to recognize that a positive Coombs test, hemolytic anemia, and liver disorders may occur with methyldopa therapy. The rare occurrences of hemolytic anemia or liver disorders could lead to potentially fatal complications unless properly recognized and managed. Read this section carefully to understand these reactions.

With prolonged methyldopa therapy, 10% to 20% of patients develop a positive direct Coombs test, usually between 6 and 12 months of therapy. Lowest incidence is at daily dosage of 1 g or less. This on rare occasions may be associated with hemolytic anemia, which could lead to potentially fatal complications. One cannot predict which patients with a positive direct Coombs test may develop hemolytic anemia. Prior existence or development of a positive direct Coombs test is not in itself a contraindication to use of methyldopa. If a positive Coombs test develops during methyldopa therapy, determine whether hemolytic anemia exists and whether the positive Coombs test may be a problem. For example, in addition to a positive direct Coombs test there is less often a positive indirect Coombs test which may interfere with cross matching of blood.

At the start of methyldopa therapy, it is desirable to do a blood count (hematocrit, hemoglobin, or red cell count) for a baseline or to establish whether there is anemia. Periodic blood counts should be done during therapy to detect hemolytic anemia. It may be useful to do a direct Coombs test before therapy and at 6 and 12 months after the start of therapy. If Coombs-positive hemolytic anemia occurs, the cause may be methyldopa and the drug should be discontinued. Usually the anemia remits promptly. If not, corticosteroids may be given and other causes of anemia should be considered. If the hemolytic anemia is related to methyldopa, the drug should not be reinstituted. When methyldopa causes Coombs positivity alone or with hemolytic anemia, the red cell is usually coated with gamma globulin of the IgG (gamma G) class only. The positive Coombs test may not revert to normal until weeks to months after methyldopa is stopped.

Should the need for transfusion arise in a patient receiving methyldopa, both a direct and an indirect Coombs test should be performed on his blood. In the absence of hemolytic anemia, usually only the direct Coombs test will be positive. A positive direct Coombs test alone will not interfere with typing or cross matching. If the indirect Coombs test is also positive, problems may arise in the major cross match and the assistance of a hematologist or transfusion expert will be needed.

Fever has occurred within first 3 weeks of therapy, sometimes with eosinophilia or abnormalities in liver function tests, such as serum alkaline phosphatase, serum transaminases (SGOT, SGPT), bilirubin, cephalin cholesterol flocculation, prothrombin time, and bromsulphalein retention. Jaundice, with or without fever, may occur, with onset usually in the first 2 to 3 months of therapy. In some patients the findings are consistent with those of cholestasis. Rarely fatal hepatic necrosis has been reported. These hepatic changes may represent hypersensitivity reactions; periodic determination of hepatic function should be done particularly during the first 6 to 12 weeks of therapy or whenever an unexplained fever occurs. If fever and abnormalities in liver function tests or jaundice appear, stop therapy with methyldopa. If caused by methyldopa, the temperature and abnormalities in liver function characteristically have reverted to normal when the drug was discontinued. Methyldopa should not be reinstituted in such patients.

Rarely, a reversible reduction of the white blood cell count with primary effect on granulocytes has been seen. Reversible thrombocytopenia has occurred rarely. When used with other antihypertensive drugs, potentiation of antihypertensive effect may occur. Patients should be followed carefully to detect side reactions or unusual manifestations of drug idiosyncrasy.

Use in Pregnancy: Use of any drug in women who are or may become pregnant requires that anticipated benefits be weighed against possible risks; possibility of fetal injury can not be excluded.

Precautions: Should be used with caution in patients with history of previous liver disease or dysfunction (see Warnings). May interfere with measurement of: uric acid by the phosphotungstate method, creatinine by the alkaline picrate method, and SGOT by colorimetric methods. Since methyldopa causes fluorescence in urine samples at the same wavelengths as catecholamines, falsely high levels of urinary catecholamines may be reported. This will interfere with the diagnosis of pheochromocytoma. It is important to recognize this phenomenon before a patient with a possible pheochromocytoma is subjected to surgery. Methyldopa is not recommended for patients with pheochromocytoma. Urine exposed to air after voiding may darken because of breakdown of methyldopa or its metabolites.

Stop drug if involuntary choreoathetotic movements occur in patients with severe bilateral cerebrovascular disease. Patients may require reduced doses of anesthetics; hypotension occurring during anesthesia usually can be controlled with vasopressors. Hypertension has recurred after dialysis in patients on methyldopa because the drug is removed by this procedure.

Adverse Reactions: *Central nervous system:* Sedation, headache, asthenia or weakness, usually early and transient; dizziness, lightheadedness; symptoms of cerebrovascular insufficiency, paresthesias, parkinsonism, Bell's palsy, decreased mental acuity, involuntary choreoathetotic movements; psychic disturbances, including nightmares and reversible mild psychoses or depression.

Cardiovascular: Bradycardia, aggravation of angina pectoris. Orthostatic hypotension (decrease daily dosage). Edema (and weight gain) usually relieved by use of a diuretic. (Discontinue methyldopa if edema progresses or signs of heart failure appear.)

Gastrointestinal: Nausea, vomiting, distention, constipation, flatus, diarrhea, mild dryness of mouth, sore or "black" tongue, pancreatitis, sialadenitis.

Hepatic: Abnormal liver function tests, jaundice, liver disorders.

Hematologic: Positive Coombs test, hemolytic anemia. Leukopenia, granulocytopenia, thrombocytopenia.

Allergic: Drug-related fever, myocarditis.

Other: Nasal stuffiness, rise in BUN, breast enlargement, gynecomastia, lactation, impotence, decreased libido, dermatologic reactions including eczema and lichenoid eruptions, mild arthralgia, myalgia.

Note: Initial adult dosage should be limited to 500 mg daily when given with antihypertensives other than thiazides. Tolerance may occur, usually between second and third month of therapy; increased dosage or adding a thiazide frequently restores effective control. Patients with impaired renal function may respond to smaller doses. Syncope in older patients may be related to increased sensitivity and advanced arteriosclerotic vascular disease; this may be avoided by lower doses.

How Supplied: Tablets, containing 125 mg methyldopa each, in bottles of 100; Tablets, containing 250 mg methyldopa each, in single-unit packages of 100 and bottles of 100 and 1000; Tablets, containing 500 mg methyldopa each, in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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ALASKAN ADVENTURE

As announced in a previous issue of the *Journal,* MASA's summer trip for 1976 will be a fabulous Alaskan Adventure. The Alaskan Adventure will depart via chartered United Air Lines DC-8 jet on June 17, 1976 and fly directly to Vancouver, British Columbia.

One of the best features of this cruise is that when you board the Island Princess in Vancouver you will only unpack once for the full nine-day cruise. The Island Princess has every convenience and comfort available. It is a 20,000-ton elegant cruiser with 550 feet of spacious decks, lounges, dance floors, heated swimming pool, theatre, etc. The list could go on and on. Also, there is a generous 70-pound baggage allowance.

The Alaskan Adventure, arranged in conjunction with INTRAV, lists these outstanding ports-of-call—Vancouver, Ketchikan, Juneau, Skagway, Glacier Bay and Sitka. A Cruise Director will be available to arrange shipboard activities, shore excursions, shopping and to assist with all the optional shore excursions in each port.

The Alaskan Adventure is priced from $1198, depending on the stateroom category selected. This price includes the round trip jet transportation, the staterooms, plus complete American Breakfasts, full course lunch and dinner, afternoon teas and midnight snacks.

Below is a form for you to fill out to reserve your place on this excellent trip. Reservations are limited, so send in your reservations today with a deposit of $100, or contact the MASA Central Office for more information. ■



The Island Princess





ALASKAN ADVENTURE

PLEASE MAKE MY RESERVATION(S) FOR THE ALASKAN ADVENTURE.
ENCLOSED IS MY DEPOSIT OF $_____. ($100 for each reservation).

NAME _____ No. in Party_____

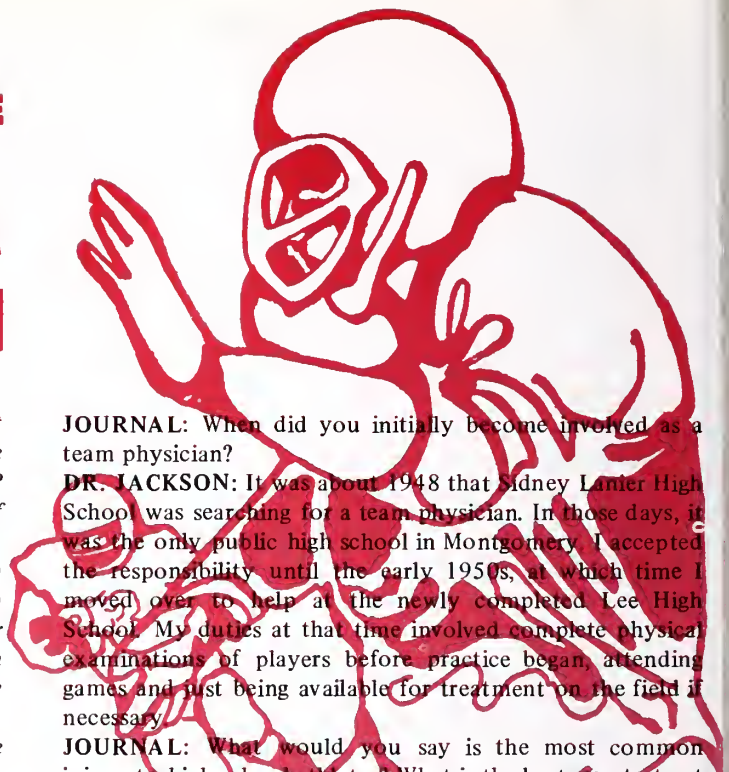
ADDRESS _____

CITY _____ STATE _____ ZIP_____

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RETURN RESERVATION TO: MASA, 19 SO. JACKSON ST., MONTGOMERY, ALA., 36104.

THE ROLE OF THE TEAM PHYSICIAN



An injured athlete presents a medical emergency that demands immediate attention and careful judgment by the attending physician. How should the athlete be treated? How serious is the injury? Can he return to action, and if so, how soon?

The true value of a physician to an athletic team has no price tag; his medical supervision is a necessity. It is he who determines the extent of injury or illnesses that may occur during practice and the game. It is he who attends to each player's specific medical needs. It is he who gives primary medical care to the injured athlete—on the football field, the baseball diamond, the tennis court, wherever people are engaged in their athletic pursuits.

To gain a first-hand account of the contributions made by team physicians all across Alabama and the enormous responsibility which is theirs, the Journal visited with Dr. B. F. Jackson, Jr., Montgomery surgeon. He is currently medical consultant to the Robert E. Lee High School football team in Montgomery.

A native of Clayton, Dr. Jackson came to Montgomery to begin his practice of general surgery in March, 1939. Dr. Jackson, his father, Dr. B. F. Jackson, Sr., and Dr. Truett Jackson opened Jackson Hospital and Clinic in Montgomery in 1946. He and his wife have five sons, one of which is currently enrolled in the Vanderbilt University School of Medicine.



Lee coach Tom Jones (l) shares his prognostications for the remaining season with Dr. Jackson.

JOURNAL: When did you initially become involved as a team physician?

DR. JACKSON: It was about 1948 that Sidney Lanier High School was searching for a team physician. In those days, it was the only public high school in Montgomery. I accepted the responsibility until the early 1950s, at which time I moved over to help at the newly completed Lee High School. My duties at that time involved complete physical examinations of players before practice began, attending games and just being available for treatment on the field if necessary.

JOURNAL: What would you say is the most common injury to high school athletes? What is the best way to treat it?

DR. JACKSON: I would say that sprained ankles have been and continue to be an injury that plagues more athletes than any other. There still exist no quick cures for sprained ankles, a fact that an athlete who is anxious to return to the game often forgets. As for treatment, if there is no fracture, immobilization in a cast for 10 days followed by intensive physical therapy are called for. Afterwards, taping of the athlete's ankle before each practice session and each game should be administered in order that it be firmly supported.

JOURNAL: What has been the most unusual injury that you have come across in your experience as a team physician?

DR. JACKSON: It was the first play of the game—opening kickoff—and the ball carrier was tackled head-on (a "spearing" tackle—head butt) by a Lee player. As the offensive and defensive teams took the field, the Lee tackler remained motionless, flat on his stomach. Several minutes elapsed before I could get to him and begin administering aid. Everyone was afraid to move him or even remove his helmet. Thank God no one did, because the boy had sustained a broken neck. An ambulance was available and we rushed him off to the hospital. He was temporarily paralyzed for several days, but fortunately recovered. I firmly believe that if someone had, in their haste, attempted to move his head during the on-field treatment, he probably would have been a paraplegic today.

JOURNAL: What are your feelings about "spear" tackling?

DR. JACKSON: Those seriously concerned about the physical welfare of football players have focused on the increasing number of serious head and neck injuries. Athletic teams are governed by rules which are intended to protect the athlete from serious injury. However, there is no way a person can play football without involving his head at one time or another. Football is that kind of game. Head contact from blocking and tackling is impossible to

"It was the first play of the game—opening kickoff—and the ball carrier was tackled head on... everyone was afraid to move him... thank God no one did..."

remove. Therefore, present emphasis seems to be upon improving equipment and educating coaches as to what playing techniques are considered hazardous.

JOURNAL: What, in your opinion, is an area commonly overlooked by team physicians in their relationship to the players and their coaching staff?

DR. JACKSON: Too often we take for granted that the coach and his staff already know how to properly tape a joint or extremity for the athlete's best protection. This is not always the case. I find it extremely important that the physician go over with the coaching staff *all* taping procedures before the practice session begins. This bit of hindsight is imperative, especially when the majority of players today are using the low quarter shoes.

JOURNAL: What has your relationship with the many young athletes meant to you through the years?

DR. JACKSON: Having sons of my own, I value the friendships that I have developed with the young people and their coaches. It has been fun and enjoyable, but more than that, I feel as though I have made some contribution to the lives of untold numbers of athletes. It is a good feeling; one of an inward, intangible quality. Other team physicians, I know, are very familiar with that same feeling—it's the real source of energy that keeps them going. ■

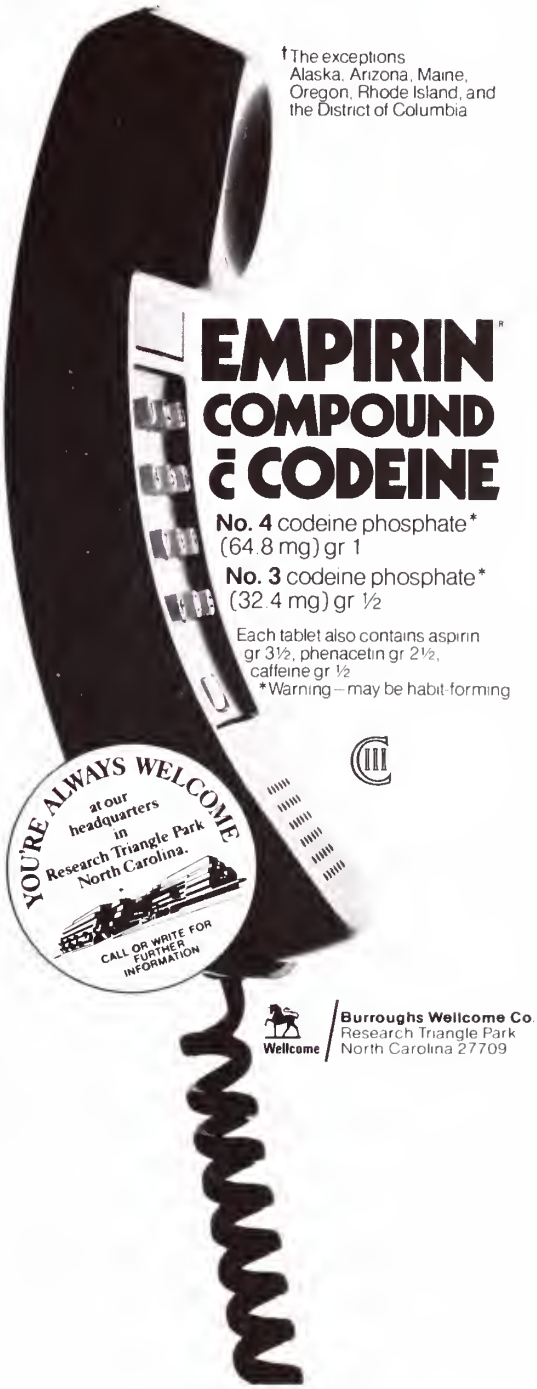


During an afternoon practice session Dr. Jackson demonstrates correct taping procedures with Lee coaches and athletes.

The Pain Phone

When a telephone prescription for pain relief is necessary or convenient, you can call in your order for Empirin Compound with Codeine in 45 of the 50 states† That includes No. 4, which provides a full grain of codeine for more intense, acute pain.

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EDITOR'S NOTE: Mrs. Campbell is a staff writer for THE BIRMINGHAM NEWS. The source of her article is a family ledger which passed through many hands and ultimately into her possession. The article appeared in the "Alabama Amblings" feature of the August 27, 1975 edition of THE BIRMINGHAM NEWS. Reprinted by permission.

NANCY CAMPBELL

25¢ Doctor Bill

The good doctor was paid $2.50 in cash for making a house call when Thomas Lawrence's wife suffered a miscarriage. Had she carried the baby full term, the bill would have been $5 for a normal delivery.

Oscar Bates was less prosperous. He had to pay off two routine visits from the M.D. with a box of snuff.

When faced with a whopping debt of $21.50, Robert Logan was forced to part with his watch. And a person with few assets, like Oscar Bates, could get a $2 credit toward his account by hauling manure all day.

Times were tough and currency scarce in rural Cullman County during the 1890s. Farm people still were living the Colonial lifestyle of an intricate bartering system, since so few could lay their hands on cash.

The antique ledger of Dr. L. M. Keller of Eva has made its way into the 20th century and the hands of a descendant. It is a splendid commentary on the day and indicates that this physician-merchant-educator-farmer didn't have much more money than his poorer neighbors.

Food was typical payment for simple tooth extractions (25 cents), one visit and medicine ($1.50), treatment of cut foot (about $2) or lancing of a boil (50 cents). Bacon valued at 10 cents per pound in 1897, a pig worth about $2, a $1 goat or a few bushels of corn, oats or potatoes and fodder always were welcome.

Physical types worked off debts by attending Dr. Keller's store. Half a day's work was worth about 50 cents. Others would fix his organ, work on the chimney or keep his washed-out dirt road in repair. One fellow was credited for delivering the doctor's mail, another by hauling his crops into Cullman.

Inflation was one economic problem these folks didn't experience. Doctor fees varied little between 1897 and 1902, the period covered by the penciled ledger. Delivery of a breech baby ($3) remained constant the six years.

Dr. Keller states the harshness of life matter-of-factly. One poor man was charged only $2.50, a "discount", because his wife was attended "too late"—she died while giving birth. Many mothers-to-be didn't make it, but even more stillborns are recorded.

A typical entry reads simply: "Aug. 18, 1900, the day Emma died, $2. Henry of the same family died five days later.

On the lighter side, Ance Williams was charged 25 cents "extry" for each of Dr. Keller's visits. Perhaps he lived very far away or owned a particularly vicious dog. Maybe old Ance was just plain ornery, more trouble than he was worth. ■

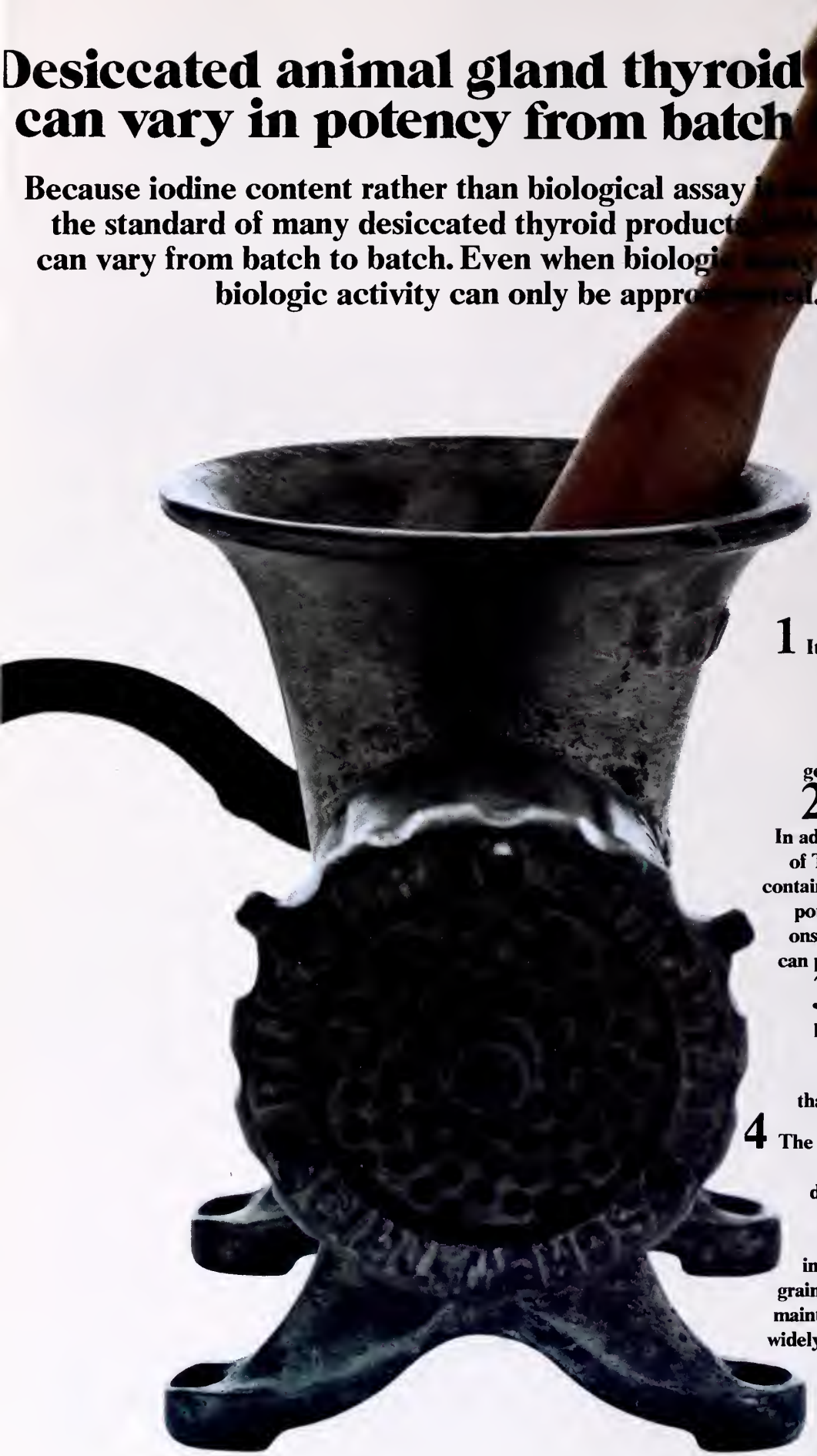
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Because iodine content rather than biological assay is used to measure the standard of many desiccated thyroid products, biologic activity can vary from batch to batch. Even when biologic assay is employed, biologic activity can only be approximated.



1 It is recognized that T_4 and T_3 content in desiccated thyroid and thyroglobulin varies from animal to animal, by animal species, geography, and animal diet.

2 Of therapeutic concern: In addition to varying amounts of T_4, desiccated thyroid may contain varying amounts of T_3, a potent compound with rapid onset and fleeting action that can produce metabolic surges.

3 Even when kept under proper storage conditions, desiccated thyroid deteriorates more rapidly than the synthetic hormone.

4 The "usual maintenance dose" for the widely prescribed desiccated thyroid is "from 1 grain to 3 grains per day, but it may vary, in individual patients from 1/2 grain to 10 grains."[1] The "usual maintenance dose" of the most widely prescribed thyroglobulin (which is also a desiccated thyroid product) is "0.5 to 3.0 grains daily."[2]

1. Armour Thyroid (Tablets). 1975 Physicians' Desk Reference. p. 561.
2. Proloid® (thyroglobulin). 1975 Physicians' Desk Reference. p. 1575.

Every batch of Synthroid® T_4 is of controlled potency. (sodium levothyroxine, U.S.P.) FLINT



SYNTHROID is T_4. It provides your patients with everything they need for complete thyroid replacement therapy.

1 Sodium levothyroxine is *not derived* from any animal gland source. It is a synthetic and, since sodium levothyroxine is the only active ingredient, its weight is the sole determinate of potency.

2 SYNTHROID (sodium levothyroxine) is T_4 which is converted by the patient to T_3 at the cellular level, thereby providing a physiologic source and amount of T_3 to meet metabolic needs for complete thyroid replacement therapy. Because the onset of effect is slower and more steady, the possibility of sudden metabolic surges is reduced with SYNTHROID therapy.

3 SYNTHROID (sodium levothyroxine) products have a longer and more reliable shelf life than Thyroid U.S.P. when kept under the same proper storage conditions. There is no animal protein present in SYNTHROID products.

4 A recent study of 44 patients with hypothyroidism indicates that 89 percent of the patients were maintained with doses of L-thyroxine (SYNTHROID) between 100 mcg. and 200 mcg. (0.1 mg. and 0.2 mg.) per day.[3]

3. Stock, J.M., Surks, M.I., and Oppenheimer, J.H.: Replacement dosage of L-thyroxine in hypothyroidism. A re-evaluation. New Engl. J. Med. *290*:529-33, 1974.

Eliminates many of the uncertainties of desiccated thyroid therapy.

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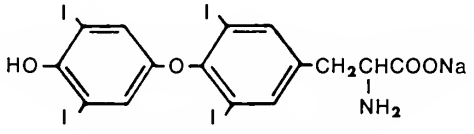
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Synthroid Tablets—for oral administration
Synthroid for Injection—for parenteral administration



Description

SYNTHROID (sodium levothyroxine) **Tablets** and SYNTHROID **Injection** contain synthetic crystalline sodium levothyroxine (L-thyroxine). L-thyroxine is the principal hormone secreted by the normal thyroid gland.



Sodium Levothyroxine

Actions

SYNTHROID (sodium levothyroxine) **Tablets,** taken orally, provide hormone that is readily absorbed from the gastrointestinal tract. SYNTHROID **Injection** is effective by any parenteral route. Following absorption, the synthetic L-thyroxine provided by SYNTHROID products cannot be distinguished from L-thyroxine that is endogenously secreted. Each is bound to the same serum proteins and each exhibits a six to seven day circulating half-life in the euthyroid individual.

Both SYNTHROID products will provide L-thyroxine as a substrate for physiologic deiodination to L-triiodothyronine. Therefore, patients taking SYNTHROID products will demonstrate normal blood levels of L-triiodothyronine even when the thyroid gland has been surgically removed or destroyed by radioiodine. Administration of levothyroxine alone will result in complete physiologic thyroid replacement.

Indications

SYNTHROID (sodium levothyroxine) products serve as specific replacement therapy for reduced or absent thyroid function of any etiology. SYNTHROID **Injection** can be used intravenously whenever a rapid onset of effect is critical, and either intravenously or intramuscularly in hypothyroid patients whenever the oral route is precluded for long periods of time.

Contraindications

There are no absolute contraindications to SYNTHROID (sodium levothyroxine) therapy. Relative contraindications include acute myocardial infarction, uncorrected adrenal insufficiency and thyrotoxicosis. (See WARNINGS)

Warnings

Patients with cardiovascular diseases warrant particularly close attention during the restoration of normal thyroid function by any thyroid drug. In such cases, low initial dosage increased slowly by small increments is indicated. Occasionally, the cardiovascular capacity of the patient is so compromised that the metabolic demands of the normal thyroid state cannot be met. Clinical judgment will then dictate either a less-than-complete restoration of thyroid status or reduction in thyroid dosage.

Endocrine disorders such as diabetes mellitus, adrenal insufficiency (Addison's disease), hypopituitarism and diabetes insipidus are characterized by signs and symptoms which may be diminished in severity or obscured by hypothyroidism. SYNTHROID (sodium levothyroxine) therapy for such patients may aggravate the intensity of previously obscured symptoms and require appropriate adjustment of therapeutic measures directed at these concomitant disorders.

Thyroid replacement may potentiate the effects of anticoagulants. Patients on anticoagulant therapy should have frequent prothrombin determinations when instituting thyroid replacement to gauge the need to reduce anticoagulant dosage.

Precautions

Overdosage with any thyroid drug may produce the signs and symptoms of thyrotoxicosis, but resistance to such factitious thyrotoxicosis is the general rule. With SYNTHROID (sodium levothyroxine) **Tablets,** the relatively slow onset of action minimizes the risk of overdose but close observation in the weeks following institution of a dosage regimen is advised. Treatment of thyroid hyperactivity induced by oral medication is confined to interruption of therapy for a week, followed by reinstitution of daily therapy at an appropriately reduced dosage.

Adverse reactions

Adverse reactions are due to overdose and are those of induced hyperthyroidism.

Dosage and administration

For most adults, a final dosage of 100 mcg (0.1 mg) to 200 mcg (0.2 mg) of SYNTHROID (sodium levothyroxine) **Tablets** daily will restore normal thyroid function and only occasionally will patients require larger doses. Failure to respond adequately to a daily oral intake of 400 mcg (0.4 mg) or more is rare and should prompt reconsideration of the diagnosis of hypothyroidism, special investigation of the patient in terms of malabsorption of L-thyroxine from the gastrointestinal tract or poor adherence to therapy.

The concomitant appearance of other diseases, especially cardiovascular diseases, usually dictates a replacement regimen with initial doses smaller than 100 mcg/day (0.1 mg).

In otherwise healthy adults with relatively recent onset of hypothyroidism, full replacement dose of 150 mcg (0.15 mg) or 200 mcg (0.2 mg) has been instituted immediately without untoward effect and with good therapeutic response. General experience, however, favors a more cautious approach in view of the possible presence of subclinical disorders of the cardiovascular system or endocrinopathies.

The age and general physical condition of the patient as well as the severity and duration of hypothyroid symptoms determine the starting dosage and the rate of incremental dosage increase leading to a final maintenance dosage. In the elderly patient with long standing disease, evidence of myxedematous infiltration and symptomatic, functional or electrocardiographic evidence of cardiovascular dysfunction, the starting dose may be as little as 25 mcg (0.025 mg) per day. Further incremental increases of 25 mcg (0.025 mg) per day may be instituted at three to four week intervals depending on patient response. Conversely, otherwise healthy adults may be started at higher daily dosage and raised to the full replacement dosage in two to three weeks. Clearly it is the physician's judgment of the severity of the disease and close observation of patient response which determines the rate of dosage titration.

Laboratory tests to monitor thyroid replacement therapy are of limited value. Although measurement of normal blood levels of thyroxine in patients on replacement regimens frequently coincides with the clinical impression of normal thyroid status, higher than normal levels on oral replacement of levothyroxine occasionally occurs and should not be considered evidence of overdosage per se.

In all cases, clinical impression of the well-being of the patient takes precedence over laboratory determination in determining the appropriate individual dosage.

In infants and children, there is a great urgency to achieve full thyroid replacement because of the critical importance of thyroid hormone in sustaining growth and maturation. Despite the smaller body size, the dosage needed to sustain a full rate of growth, development and general thriving is higher in the child than in the adult, as much as 300 mcg (0.3 mg) to 400 mcg (0.4 mg) per day.

In myxedema coma or stupor, without concomitant severe heart disease, 200 to 500 mcg of SYNTHROID **Injection** may be administered intravenously as a solution containing 100 mcg/ml. Although the patient may show evidence of increased responsivity within six to eight hours, full therapeutic effect may not be evident until the following day. An additional 100 to 300 mcg or more may be given on the second day if evidence of significant and progressive improvement has not occurred. Like the oral dosage form, SYNTHROID **Injection** produces a predictable increase in the circulating level of hormone with a long half-time. This usually precludes the need for multiple injections but continued daily administration of lesser amounts intravenously should be maintained until the patient is fully capable of accepting a daily oral dose.

In the presence of concomitant heart disease, the sudden administration of such large doses of L-thyroxine intravenously is clearly not without its cardiovascular risks. Under such circumstances, intravenous therapy should not be undertaken without weighing the alternative risks of the myxedema coma and the cardiovascular disease. Clinical judgment in this situation may dictate smaller intravenous doses of levothyroxine.

SYNTHROID **Injection** by intravenous or intramuscular routes can be substituted for the oral dosage form when ingestion of SYNTHROID **Tablets** is precluded for long periods of time.

How supplied

SYNTHROID (sodium levothyroxine) **Tablets** are supplied as scored, color-coded compressed tablets in 6 concentrations: 25 mcg (0.025 mg)—orange . . . 50 mcg (0.05 mg)—white . . . 100 mcg (0.1 mg)—yellow . . . 150 mcg (0.15 mg)—violet . . . 200 mcg (0.2 mg)—pink . . . 300 mcg (0.3 mg)—green. Depending on strength, these tablets are available in bottles of 100, 500, 1000 and 5000.

SYNTHROID (sodium levothyroxine) for **Injection** is supplied in 10 ml vials containing 500 mcg of lyophilized active ingredient and 10 mg of Mannitol, U.S.P. A separate 5 ml vial containing Sodium Chloride Injection, U.S.P. is provided as a diluent.

Directions for reconstitution

Reconstitute the lyophilized sodium levothyroxine by aseptically adding 5 ml of the Sodium Chloride Injection, U.S.P. to the vial. Shake vial to insure complete mixing. **Use immediately** after reconstitution. Discard any unused portion.

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*U.S. Pat. 2,889,363

Sickle Cell Disease and The Liver

Thomas W. Sheehy, M.D.*

Forty-three years after Herrick described sickle cell disease, Green et al called attention to some of the hepatic lesions associated with this disease [1]. Since then, jaundice, secondary to viral hepatitis, alcoholic cirrhosis, hepatic crisis, choledocholithiasis and a peculiar affliction resembling obstructive hepatitis (cholangiolar jaundice) have been reported in sickle cell patients[1-6]. Comparatively few reports dealing with the latter entity are available. Patients afflicted with it have hyperbilirubinemia, increased serum alkaline phosphatase levels, acholic stools, bilirubinuria and other signs of biliary tract obstruction without actual obstruction. The unusual features of cholangiolar hepatitis, and the diagnostic dilemma caused by it, led us to report two additional cases.

Case I

This 44-year-old black man with sickle cell disease was admitted to University Hospital on 18 January 1973 with a productive cough, fever of 4 days' duration and peri-umbilical pain of 2 days' duration. He had dark urine and yellow conjunctivae for the past four days.

He had a past history of recurrent abdominal and hemolytic crisis, congestive heart failure, mitral regurgitation and gout. He took digoxin, 0.25 mg daily, hydrochlorothiazide, 50 mg daily, frolic acid, 1 mg daily, and allopurinol, 100 mg daily.

He was a thin, asthenic, oriented black man. Blood pressure was 140/90 mm Hg; pulse 79/min. and irregular; temperature 100 degrees F. The conjunctivae were icteric; corkscrew vessels were evident. Bilateral systolic bruits were heard over both carotids. Faint inspiratory bibasilar rales were present. Dullness to percussion, bronchial breath sounds and increased tactile fremitus were noted over the right lung posteriorly. The heart was enlarged; the maximum impulse being at the left anterior axillary line. A left parasternal lift and palpable S3 were present. A Grade 3/6 systolic ejection murmur was heard along the left sternal border. It radiated to the axilla. Abdominal palpation revealed right upper quadrant tenderness. The liver was enlarged with an estimated span of 14 cm.

Hematocrit was 21 per cent, WBC 25,700 cu mm, with 85 per cent neutrophils; platelet count, 84,000 cu mm and reticulocyte count 8.7 per cent. Numerous sickle cells and nucleated red blood cells were seen on the peripheral blood smear. Other tests included: blood pH 7.38 PO2 85/mm Hg; PC02 14/mm Hg; BUN 45 mgm per cent; creatinine 3.0 mgm per cent; albumin 1.9 grams per cent; globulin 1.4 grams per cent; serum bilirubin 45 mgm per cent, conjugated 31 mgm per cent; SGOT 290 International Units; alkaline phosphatase 250 International Units; LDH 1600 International Units. Prothrombin times (P.T.) 15.7 seconds, control 11.7 seconds; serum potassium 6.6 mEq/L; urine pH 6.0; specific gravity 1.012, with 5 to 6 RBCs and 4 to 6 WBCs per high power field.

Chest x-ray revealed a right lower lobe pneumonia; a gram stain of sputum showed Gram positive diplococci within and without polymorphonuclear cells.

The patient was given penicillin therapy for his pneumonia and Kayexalate therapy for hyperkalemia. The following morning the serum potassium was 7.7 mEq/L; the pulse rate was 54/minute. An electrocardiogram showed tall T-wave with widening of the QRS complex. Following administration of glucose and insulin, the potassium level dropped to 5.8 mEq/l.

Subsequently, oliguria ensued. Its persistence led to a resurgence of hyperkalemia and fluid overload. Peritoneal dialysis led to an improved urine output of 30 to 40 ml per hour.

During the next two days, the patient's jaundice worsened steadily. Total serum bilirubin rose to 98 mgm per cent, conjugated 70 mgm per cent. Part of the rise was attributed to renal failure. The patient continued to deteriorate and lapsed into hepatic coma. On the third hospital day, he had several black stools and began to ooze blood from the rectum and venipuncture sites. The PT increased to 47 seconds, control 12 seconds, and the partial thromboplastin time (PTT) to 5 minutes, control 40 seconds. On the fifth hospital day, he lapsed into hepatic coma and died following a sudden respiratory arrest.

Autopsy revealed ascites, a hypertrophied left ventricle and patchy bronchopneumonia. Multiple scars were noted on the surface of both lungs. One large bilirubin stone, 0.7 cm in diameter, was found in the gall bladder. The spleen was atrophic. The bile stained liver (1600 g) had a granular surface pitted by several large scarred lesions suggestive of old infarcts (Fig. 1). The common bile duct was patent. The kidneys were small, bile stained and scarred.

Microscopically, there was evidence of interstitial cardiac fibrosis, bilateral patchy bronchopneumonia and postnecrotic cirrhosis with collapse of liver cords and lymphocytic infiltration. Many hepatic sinusoids were distended and others were occluded by sickled erythrocytes (Fig. 2). In the liver, scattered areas of focal necrosis and fibrosis without apparent lobular relationship were observed. Large pigment ladened Kupffer cells were seen in both necrotic and normal areas (Fig. 3). Bile canaliculi were distended. Hemosiderin deposits were prominent in the hepatic cells

***Professor of Medicine, University of Alabama School of Medicine; Chief, Medical Service, Veterans Administration Hospital, Birmingham.**



FIGURE 1
Gross appearance of liver.
Note large scarred areas on surface of right and left lobes.

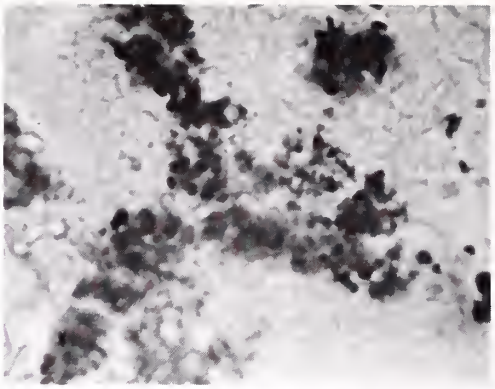


FIGURE 4
Hemosiderin deposits within hepatic cells.

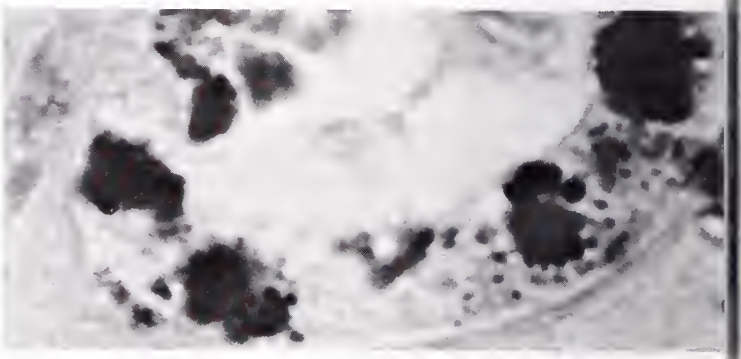


FIGURE 5
Hemosiderin deposits within renal tubular cells.

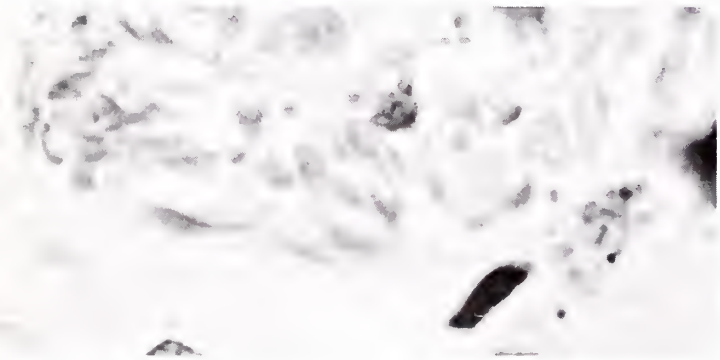


FIGURE 2
Sickled erythrocytes blocking sinusoids.

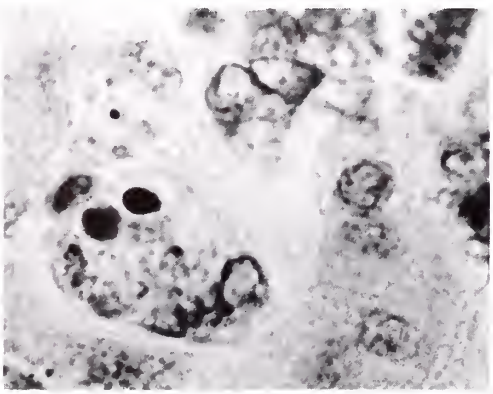


FIGURE 3
Hypertrophied Kupffer cells.

and renal tubular cells (Figs. 4-5). Multiple focal acute cortical infarcts were seen in both kidneys. The bone marrow showed erythroid hyperplasia.

Case II

This 47-year-old black man had known sickle cell disease since 1961. Abdominal crises had led to three previous admissions, 1961, 1962 and 1969. Cholelithiasis was observed in 1969. During that hospitalization, he developed Gram negative septicemia secondary to urinary tract infection.

In the following years, he experienced several brief bouts of generalized weakness and abdominal pain, but these attacks resolved spontaneously. Six days before his last admission, he developed generalized abdominal and joint pain. He became nauseated, weak, easy fatigued and vomited on several occasions. His urine turned dark and he lost his taste for cigarettes. He had been a spree drinker for 15 years.

Physical examination revealed a lethargic, but oriented, cachetic black man. Blood pressure 134/70 mm Hg; pulse 85/minute and regular. The heart was enlarged with the maximum impulse in the 6th intercostal space in the midclavicular line. A Grade 3/6 systolic ejection murmur was heard at the apex and along the left sternal border. On percussion, his liver was tender and had an estimated 16 cm span. The testes were atrophic; there was marked finger and toe clubbing; no spider angiomata were present.

The hematocrit was 16 per cent; reticulocyte count 10 per cent; white blood cell count 34,500 cu mm, with 85 per cent neutrophiles. BUN 90 mgm per cent; creatinine 10 mgm per cent; the urine was positive for bile and contained

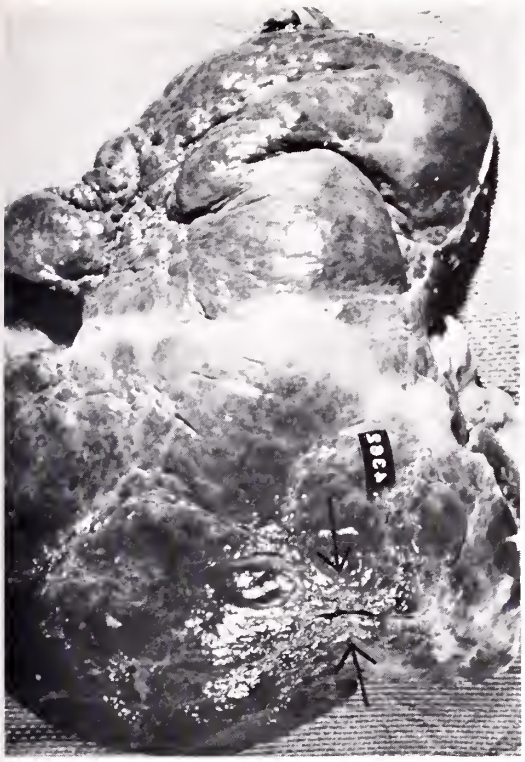


FIGURE 6
Gross appearance of liver (Patient 2). Note scarred pitted areas on left lobe and arrows pointing to areas of recent infarction.



FIGURE 7
Stone-filled gallbladder (Patient 2).

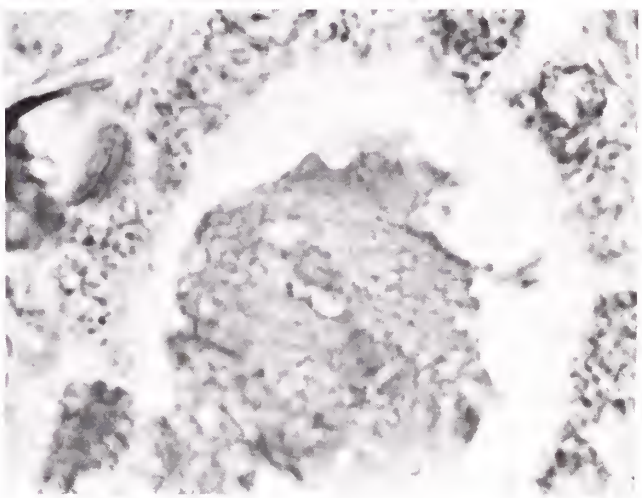


FIGURE 8
Pigment Plugs in Renal Tubules (Patient 2).

many white blood cells. Arterial pH was 7.27; PO2 71 mm Hg; PCO2 25 mm Hg; P.T. 40 seconds, control 11 seconds; P.T.T. 180 seconds, control 30 seconds; total serum bilirubin 87.4 mgm per cent, conjugated 43.8 mgm per cent; SGOT 143 International Units; alkaline phosphatase 324 Internation Units; albumin 1.8 grams per cent; globulin 1.4 grams per cent.

The admission diagnoses were abdominal crisis, renal failure and questionable choledocholithiasis. The patient was treated carefully with fluids and sodium bicarbonate for his acidosis with initial improvement. He was given morphine sulfate for his pain and Vitamin K and fresh frozen plasma to improve coagulation. Several blood transfusions were given to decrease sickling and to raise the hematocrit. He remained jaundiced and began to develop signs of hepatic failure. A liver scan revealed several large areas of decreased uptake consistent with infarction. On the third hospital day, he became comatose. On the fourth hospital day, peritoneal dialysis was carried out without complications in an attempt to improve renal function. By the sixth hospital day, his hematocrit had fallen to 17 per cent, his creatinine was 6.0 mgm per cent and BUN 84 mgm per cent. He began to bleed profusely from all orifices and on the seventh hospital day he expired.

An autopsy, the heart was enlarged and the left ventricle hypertrophied. The lungs were slightly edematous and the liver was enlarged (weight 2650 g), greenish-brown in color and had a moderately nodular surface. Several large scarred areas suggestive of old infarcts were present (Fig. 6). The gall bladder was distended and filled with several hundred black stones (Fig. 7). Its mucosa was thickened and muddy-red in color. The common, pancreatic and hepatic ducts were patent. The spleen weighed 10 grams. The kidney surface showed multiple scarred areas. Petechiae were present throughout the gastrointestinal tract. A right cerebellar hemorrhage was present.

Microscopically, the heart contained many histocytes loaded with hemosiderin. Areas of focal fibrosis and hemorrhages were scattered throughout the lung fields. Areas of fibrosis were also present in the scarred surface areas of the liver. Recent necrosis was evident grossly and microscopically over one large area (3 x 5 cm) of the liver. Giant Kupffer cells were present throughout the liver. Inflammatory cells were seen about the portal triads in

isolated sections of the liver. Many canaliculi were filled with bile pigment. Large hemosiderin deposits were present in parenchymal cells. Numerous sinusoids contained sickle cell thrombi. Cholemic nephrosis was present. The renal tubular cells contained large amounts of hemosiderin and the renal tubules large amounts of pigment (Fig. 8).

Discussion

Patient No. 1 had multiple problems contributing to his death, including acute and chronic renal disease, gout, as well as liver disease with coagulation abnormalities and cholangiolar jaundice secondary to sickle cell disease.

Patient No. 2 had cholelithiasis, alcoholic cirrhosis, chronic pyelonephritis, cholemic nephrosis and cholangiolar jaundice.

Both patients had laboratory findings consistent with extrahepatic obstructive jaundice but neither had occluded common bile ducts. Both, also, had gross liver scars suggestive of old infarction, renal failure, and at the time of death, impairment of their intrinsic and extrinsic coagulation system.

Hepatic Crisis

The majority of SS patients have hemolytic jaundice and about 10 per cent suffer from attacks of intrahepatic "obstructive jaundice", so-called "hepatic crisis"[7]. These attacks may be accompanied by bone, joint, or abdominal pain or the patient may have vague symptoms, jaundice and dark urine. They are recurrent, and their severity is exaggerated by pregnancy and age. Bilirubinemia is prevalent with serum levels ranging from 6 to 15 mgm per cent during attacks. However, SGOT levels rarely exceed 300 International Units. Prognosis is poor when the total serum bilirubin level reaches 25 mgm per cent during attacks. However, SGOT levels rarely exceed 300 International Units. Prognosis is poor when the total serum bilirubin level reaches 25 mgm per cent. Hepatic crisis can be differentiated from viral hepatitis by its shorter course, 3-5 days, and by histological changes seen on liver biopsy.

The Liver and Other SS Crises

The liver appears to suffer from repeated insults in SS disease. Recently, hepatocellular injury with accompanying enzymatic and microscopic signs of damage was found to occur with *all* types of sickle cell crisis and not just hepatic crisis. Serial liver biopsies performed on both jaundiced and non-jaundiced SS patients with different types of crisis showed comparable hepatocellular changes[8]. These changes were most impressive at the height of crisis and they subsided rapidly as the crisis cleared. Electron microscopy studies showed liver injury to be more extensive in jaundiced then in the non-jaundiced SS patients. Thus, it seems the SS patient who suffers from crisis, irrespective of type, is subject to recurrent liver injury throughout life.

Interestingly, the microscopic hepatocellular changes noted with the various type of SS crisis and with hepatic crisis were described over 30 years ago by Green et al in SS patients with hepatic dysfunction. They consist of Kupffer cell hypertrophy, stagnation of sickle cell erythrocytes in the hepatic sinusoids, sickled thrombi within the hepatic sinusoids, sickled thrombi within the hepatic arterioles and venous capillaries, dilated canaliculi, hemosiderin deposits within the parenchymal cells and paracentral necrosis and atrophy[1,2,9].

Cholangiolar hepatitis refers to a more severe state of hepatocellular dysfunction. Sickle cell patients with this disorder have jaundice, an erythroblastic crisis, hepatomegaly, elevated hepatic enzymes, severe hyperbilirubinemia, and sometimes hemoglobinuria, acholic stools and a leukemoid reaction. All the findings suggestive of common bile duct obstruction are present but physical obstruction is not present.

To date, only 8 cases of cholangiolar jaundice have been reported. In cholangiolar hepatitis, the total serum bilirubin may exceed 100 mgm per cent. However, neither the hyperbilirubinemia nor the elevated serum alkaline phosphatase level are diagnostic of this condition. Hyperbilirubinemia with botal serum bilirubin levels ranging between 30 and 70 mgm per cent may occur in SS patients with viral hepatitis, alcoholic hepatitis and other types of hepatocellular disease. But, extremely elevated bilirubin levels, 40 to 120 mgm per cent, in SS patients are highly suggestive of cholangiolar hepatitis.

As mentioned previously, liver biopsies taken from patients expiring with cholangiolar hepatitis show most of the morphologic changes described in patients with so-called hepatic crisis, but they are more severe. In some, histological evidence of cirrhosis, either macronodular or postnecrotic, is also present.

It seems reasonable to suspect that cholangiolar hepatitis may result from recurrent attacks of hepatic crisis or liver injury sustained over the years in associated with other types of crises. The extensive liver scarring noted in our patients suggests extensive hepatic infarction may also occur from time to time in association with hepatic crisis. These insults leave their imprint on the liver. Hepatic infarction, hepatic injury sustained during ordinary crisis, chronic hemolysis, alcoholism and other forms of liver disease may compound sickle cell hepatic disease and eventually lead to hepatic failure. The extreme hyperbilirubinemia accompanying cholangiolar hepatitis results from the combined effects of hemolysis, renal and hepatic failure.

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Breast Cancer: The Great New Concern

Robert D. Moreton, M.D.*
Gerald D. Dodd, Jr., M.D.**

Nationwide attention on breast cancer was primarily stimulated by surgery on both the First Lady, Mrs. Ford, and Mrs. Rockefeller in a period of less than a month. Certainly, this did much to publicize the problem and stimulate growing interest in the joint American Cancer Society-National Cancer Institute demonstration projects designed to emphasize the importance of early detection of breast cancer.

Not over a dozen years ago, the management of breast cancer was generally a "cut and dried" affair. A woman found a lump in her breast and reported it to her physician. An early cancer meant a barely palpable mass without the slightest attachment to skin or underlying structures. These were only a little less likely to have produced axillary spread than a tumor obvious to the examiner's fingers. The outlook and improvement in mortality over the years have been discouraging and fear kept many women from reporting this finding—and others from even carrying out examinations until too late.

Thermography

Current evidence would indicate that early diagnosis continues to be the only method of achieving improvement in the mortality rate of this disease. Toward this end, several diagnostic techniques have been employed. Activity has been particularly notable in the fields of thermography and mammography, the latter including both film and xerographic techniques.

Thermography is a potentially rapid screening method that is inexpensive and does not expose the patient to radiation. It is a technique of imaging or mapping the infrared radiations emitted by an object. Even though the method has been discounted by some, it is one that requires careful adherence to certain principles of technique and interpretation.

In collaboration with Texas Instruments, we have designed an instrument which seems to be quite sensitive. Despite the widespread practice of orienting the recorded gray scale with the black end representing the colder areas and the white the warm areas, we chose to reverse the presentation with the warmer areas being darker than the cold for the following reasons:

1. The human eye is capable of perceiving a greater number of shades of gray at the dark or lower end of the gray scale. (Berrens Scale)
2. Brightness contrast also seems to enhance the perception when a light or white surround is used.

The abnormal thermogram usually consists of a unilateral exaggeration of the superficial venous pattern. This may involve visualization of one or more venous segments not apparent in the contralateral breast as well as an absolute increase in the temperature of the individual veins compared to the control areas. Although the term "hot spot" has been used to describe these abnormalities, it is a misnomer in the majority of cases. Localized areas of increased heat emission, with or without venous engorgement, usually represent direct invasion of the skin.

A combination of thermal patterns may be encountered, usually with advanced tumors. These include a warm areola, engorged veins and a generalized increase in the temperature of the skin of the breast.

Individual tumors differ in their biologic potential and therefore heat production. They are also subject to an independent biologic rhythm which may be profoundly out of phase with the normal circadian rhythms of the body.

The recorded accuracy of breast thermography varies between 75 per cent and 85 per cent. However, false positive rates as high as 40 per cent may be encountered, depending upon the nature of the population examined. This is the greatest drawback of thermography in symptomatic populations and one for which no solution has been offered. Nevertheless, when combined with physical examination, an 85 per cent true positive rate may be anticipated in this group. In asymptomatic patients, the efficacy of the procedure remains in doubt; the false negative rate may not be acceptable.

There is no spatial relationship between the location of the thermographic signal and the cancer. For this reason, biopsy on the basis of a positive thermogram is not warranted; clinical or mammographic evidence is necessary for confirmatory and localization purposes.

If an acceptable true positive rate can be achieved in asymptomatic patients, thermography may well meet the need for a rapid, inexpensive screening technique. In any event, since cancers that are subclinical and subroentgen may produce a positive thermogram, the individual with the positive examination is at risk until the thermogram reverts to normal or sufficient time elapses to rule out the diagnosis of breast cancer.

History of Mammography

The past decade has seen mammography develop from an obscure investigative procedure into a practical clinical tool. It is not new. The first clinical report was published in 1930 by Warren, who achieved an overall accuracy of 86 per cent in a series of 119 cases, 58 of which were malignant. Early investigators in the United States were Seybold (1931, 1936), Lockwood (1932), and Gershon-Cohen (1937). Recent interest was stimulated in large part by publications of Egan (1960-1961), which were carried out at the M.D. Anderson Hospital.

***Vice President, The University of Texas System Cancer Center, Houston, Texas. Dr. Moreton was a guest speaker for the scientific portion of MASA's 1975 Annual Session.**
****Head, Department of Diagnostic Radiology, The University of Texas System Cancer Center, Houston, Texas.**

The technique originally recommended by Egan used low kilovoltage and high milliamperage with a short object/film distance and precise coning. A fine grain industrial film was utilized initially; later two different varieties of industrial film were employed to provide over-penetrated as well as optimal exposures in each projection.

Recently fine grain film has been combined with an intensifying screen. This has considerably diminished dose to the patient and decreased exposure time. The technique has its enthusiastic proponents while others feel that the inevitable loss of detail related to the intensifying screen makes the process undesirable. While the question remains an open one, there is no doubt that a need exists to minimize patient dosage wherever possible.

Xeroradiography

The more recent innovation in the radiographic examination of the breast is xeroradiography. This differs from film mammography primarily in the utilization of an electrostatically charged selenium-coated plate. The image formed is then transferred to a special plastic-coated paper in a special processor.

There are advocates of both procedures, however, at the present time. Those who favor the latter feel that the primary image characteristics of xeroradiography as compared with x-ray imaging are:

(1) Wide radiographic latitude;
(2) inherent edge enhancement;
(3) low broad-area contrast;
(4) less sensitivity then screen film, and
(5) more sensitivity than non-screen film.

The radiographic findings which indicate biopsy can be divided into five (5) categories: masses with and without calcification, altered architecture with or without calcification and clustered calcification with no other changes.

At times there is no palpable abnormality and a film of the specimen must be made to be certain that the lesion is included in the biopsy specimen. A "frozen section" is then made of the suspicious area. If there is question as to the probable diagnosis, definitive therapy should be deferred until the permanent histologic sections have been examined.

Patients with benign chronic breast disease, who require repeated biopsy, are at relatively high risk of developing carcinoma. Postoperative induration at a previous biopsy site may be disturbing. Mammography can be helpful in following these patients, particularly if the roentgen signs associated with the reparative process are recognized.

Mammography is not a short cut to detection and diagnosis, but rather another approach which should be used in conjunction with physical examination and possible thermography. It is discouraging that some physicians believe that mammography is apt to cause needless delay in surgery. A suspicious clinical observation should never be neglected because of lack of corroborative evidence on the mammographic examination. On the other hand, a positive mammogram should not be disregarded because of an absence of clinical findings. Obviously, the diagnosis of subclinical tumors affords the best chance for cure of the patient.

If every effort is made to use it responsibly and intelligently, mammography is and will continue to be our most effective aid in the diagnosis of early breast cancer.

I have briefly discussed two important additions to the detection and early diagnosis of cancer of the breast. Their potential is very great and, when used properly, they afford the best method at hand for decreasing the mortality rate in this disease. One must recognize, however, that the interdisciplinary approach to both detection and treatment is essential, i.e., the history and physical examination cannot be neglected and there must be no hesitation in the performance of a biopsy when indicated. The use of specimen radiography for guidance of the surgeon and pathologist is a must and thorough pathologic study of the entire specimen is necessary if early cancers are to be properly identified.

This is a disease too dangerous to watch. ■

Radiation Treatment and Thyroid Cancer

The American Hospital Association (AHA) and the American Medical Association (AMA) have joined together to encourage their members to look at the situation in their communities with respect to the incidence of cancer of the thyroid as a possible consequence of the use of radiation in the 1930s, 40s and 50s to shrink children's infected tonsils, adenoids and thymus glands.

In the 30s, 40s and 50s, it was acceptable medical practice for physicians to prescribe and administer radiation, most frequently in hospital facilities, to treat certain problems of the neck and face. In recent years, however research studies[1] have shown a high correlation between this treatment and cancer, with one study[2] showing a 7% incidence of thyroid carcinoma in unselected patients with a history of irradiation to the neck area.

It is necessary that any community or regional program be carefully planned to make certain that guidelines for screening procedures, treatment and release of information are carefully developed and agreed upon by all area providers and that other related groups, such as public health departments, be involved in the planning. A coordinated approach can minimize undue public alarm.

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SPACE AVAILABLE:

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An Unusual Anterior Mediastinal Tumor

James L Guest, Jr. M.D., James N. Anderson, M.D.
and Earl M. Simmons, M.D.*

Asymptomatic mass lesions in the anterior mediastinum offer a perplexing variety of differential diagnostic possibilities, sometimes unresolved except by thoracotomy. In most cases, if the diagnosis is not known, the surgeon can plan his operative approach based upon the anatomic location of the mass.

In the case to be described, an unusual intraoperative discovery not only changed the entire surgical plan, but almost reulted in disaster for the patient and acute apoplexy for the surgeons.

Case Report

An eighteen-year-old male was seen in the Jackson Hospital Emergency Room, Montgomery, because of a three centimeter stab wound in the anterior axillary line at the level of the left seventh intercostal space.

The blood pressure was 120/70, the pulse 100. The neck veins were not distended. Slightly diminished breath sounds were heard over the left hemithorax. The right hemithorax was clear and resonant to percussion and auscultation. No cardiac murmurs were present. All peripheral pulses were present and of symmetrical intensity.

Chest x-ray showed no hemothorax or pneumothorax, but in the left anterior, superior mediastinum, a rounded, partially calcified tumor was apparent (Fig. 1).

No history of chills, fever, weight loss, weakness, pain, hemoptysis, or extrathoracic symptoms could be elicited. Two years earlier, the patient had been involved in a serious motorcycle accident. A lacerated bladder was repaired surgically. No specific trauma to the thorax could be recalled. Two months previously he had been denied military service because of "something in my chest."

All laboratory data, including the white blood cell count and differential, sedimentation rate, SGOT, SGPT and LDH determinations were normal.

On the plain x-ray film the descending thoracic aortic shadow was clearly delimited from the mass. Fluoroscopy through the mediastinal area showed no pulsation or no connection of the tumor to the aorta. A dermoid cyst or teratoma was considered the most likely radiologic diagnosis.

The initial stab wound of the chest required no therapy other than suturing the external wound. After a few days' hospitalization, the patient's clinical status seemed stable and thoracotomy was recommended.

After a preliminary negative bronchoscopy, the patient was positioned obliquely with the left side elevated thirty degrees. The left pleural cavity was entered through a left anterolateral thoracotomy. The mass in the anterior mediastinum was firm, white, smooth, solid and well encapsulated. The incision was extended across the sternum for greater exposure. The innominate vein was dissected away without difficulty.

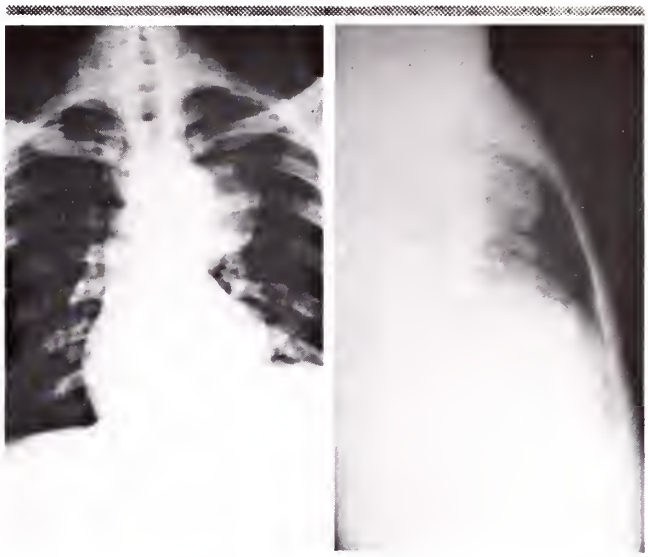


FIGURE 1.

Because of the dense adherence of the mass to the pericardium, the pericardial cavity was entered. The left pulmonary veins, and the left pulmonary artery were mobilized and separated readily from the tumor. As the descending thoracic aorta was approached, more retraction was required for adequate posterior exposure.

Suddenly, from the area of the ligamentum arteriosum, the operator was confronted with an enormous gush of bright, red blood which filled the pleural cavity within seconds. Finger compression was used to control the bleeding temporarily. The patient was turned into a more lateral position to extend the incision posteriorly. The descending thoracic aorta was rapidly mobilized and cross-clamped just below the origin of the left subclavian artery. It was then apparent that the tumor was a saccular aneurysm, the origin of which was the medial aspect of the descending thoracic aorta, four centimeters distal to the origin of the left subclavian artery. A second clamp was applied to the aorta distal to the aneurysm. The remainder of the aortic lumen appeared normal. A lateral aneurysmorrhaphy was accomplished across the neck of the aneurysm using two running layers of 3-0 plasticized suture. The total aortic crossclamp time was thirteen minutes. The aneurysmal sac, thus decompressed, was easily removed.

Postoperatively there was no evidence of spinal cord damage, and no clinical or laboratory evidence of hepatic or renal dysfunction. Eight days postoperatively the patient developed a fever of 103 degrees. The thoracotomy wound

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FIGURE 2.

was reddened and fluctuant. The wound was opened widely. Cultures revealed both *Enterobacter aerogenes* and *Staphylococcus aureus.* The infection responded to open drainage of the entire incision and intravenous antibiotics. A few weeks later the wound was healed, the patient afebrile and the chest x-ray essentially normal (Fig. 2).

Discussion

An aortic basis for this mass lesion was not considered due to its location to the anterior mediastinum. Aneurysms arising from the descending thoracic aorta ordinarily have a characteristic position on the posteroanterior and lateral roentgenograms, superimposed on the aortic shadow. This is usually quite apparent on the lateral chest projection. The present authors have been unable to find any other reported, traumatic descending aortic aneurysm which presented primarily in the anterior mediastinum.

The most logical etiology for the aneurysm was the deceleration injury which occurred two years earlier. Numerous experimental and clinical observations have established that the thoracic aorta is mobile except for two areas which are relatively fixed anatomically[1,2]. The first portion of the ascending aorta is stabilized at its origin by the annulus fibrosis, which forms the support for the cardiac aortic valve.

The descending thoracic aorta is attached to the left pulmonary artery by the ligamentum arteriosum (Botalli's ligament). Here, in the area of the fetal ductus arteriosus, tough fibers from the ligament extend into and decussate within the aortic wall, holding the aorta stationary at this point. When the thoracic cage is subjected to violent, closed trauma, the elastic aorta recoils away from these two points causing a disruption which can involve any or all of the three layers of the aortic wall.

The clinical course of such a patient depends upon the location and extent of the aortic tear, which is usually transverse, but rarely can be longitudinal or T-shaped. If the disruption involves only the intima and the media of the aorta, leaving the adventitia intact, the stage is set for the development of a false aneurysm. The adventitia has been shown to possess 60 per cent of the tensile strength of the aorta[3]. Such aneurysms are unusual after penetrating thoracic trauma, since, in these cases the tissue planes surrounding the vessel are injured. Because no support from the surrounding structures is available, aortic rupture usually occurs with immediate exsanguination.

In a fascinating study of the natural history of these lesions, Bennett and Cherry[4] reviewed the English and French literature for a fifteen-year period. They found 105 reported chronic, traumatic aneurysms which had been present longer than three months. Twenty-two of these patients were asymptomatic at least five years. Rarely an aneurysm is clinically and radiologically stable for even longer periods. Eiseman and Rainer[5] reported a post-traumatic thoracic aneurysm which remained stationary for 43 years, and then enlarged for the next four years. Ricen and Dickey's patient ruptured his aneurysm after a 27-year latent interval[6].

Surgical correction of aneurysms in this location requires cross-clamping of the thoracic aorta. This maneuver can cause not only a severe, proximal hypertension, but also distal ischemia to the spinal cord, the liver and the kidneys.

Many techniques have been devised for preventing these sequelae, including generalized hypothermia, induced hypotension, and the placement of temporary shunts from proximal to distal aorta[7]. The last method can be done simply, using plastic catheters or grafts placed in the aorta proximal and distal to the aneurysm, or by using a more complex system requiring an extracorporeal circuit and systemic heparinization.

In left atrio-femoral bypass, part of the blood from the left atrium is led through a roller pump back into the distal aorta via the femoral artery. In the femoro-femoral bypass, femoral venous blood is oxygenated with the use of a small pump oxygenator circuit, then led back into the femoral artery.

In both the latter arrangements, the arterial blood flow can be regulated so as to provide adequate oxygenated blood to the lower part of the body. However, each of

these various techniques has drawbacks which can cause worrisome complications.

Crawford et al, recently jolted the surgical world with the pronouncement that, based upon their considerable experience, such complicated shunting maneuvers are unnecessary[8]. By simplifying the surgical approach, thereby lessening the aortic cross-clamp time, their patients had an extremely low incidence of ischemic complications without using any of the aforementioned devices.

In the present case, fortunately, no serious sequelae occurred as the result of the aortic cross-clamping, probably because the repair was accomplished in a relatively short time. Had the true nature of the lesion been suspected, a posterolateral incision would have been made, and provision for induced hypotension and a temporary bypass plastic shunt would have been available.

SUMMARY

A case is presented in which a post-traumatic, saccular aneurysm of the descending thoracic aorta presented as an anterior mediastinal tumor. Although the outcome of the surgical repair was successful, a more precise diagnosis would have allowed the surgical procedure to have been carried out under a more relaxed atmosphere with more appropriate ancillary measures available. In any patient with a history of chest trauma, a mass lesion anywhere in the thoracic cavity should alert the clinician to the possibility of a delayed manifestation of vascular injury.

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Coping With Headaches

Headaches are so common that Americans spend some $400 million a year on over-the-counter remedies. According to Dr. Arnold Friedman, Monte Fiore Hospital, New York City, chronic headaches are rarely symptoms of serious disease. The odds are about 99-1 that they are not due to a brain tumor, epilepsy, or other neurological diseases.

Monte Fiore has the only full time clinic in the United States devoted to the study and treatment of headaches. These specialists say about 10% of their cases do have a physical cause such as high blood pressure, anemia, or a malformation of the blood vessels in the head.

Classic migraine is heralded by warning signs such as blind spots or flashing lights in the vision. Most sufferers have common migraines, preceded only by vague warning signs. Often mistakenly called sinus headache.

Most researchers now believe migraine is a generalized disorder of the circulatory system. However, it is agreed that without change in life style patterns, the "headache habit" is unlikely to be broken.

What then can one do about his headaches?

1) Get some fresh air daily.

2) Never underestimate the power of a couple aspirin.

3) Coffee, through its caffeine content, can help as a stimulate and vasoconstrictor.

4) Eat nutritious meals regularly.

5) Get enough rest and take some time during the day to rest. (Lunch hours and coffee breaks provide an opportunity to winddown and relax.)

6) Put the daily frustrations in their proper prospective.

7) Don't be a perfectionist.

8) Try a good laugh, it's medicine for your soul. ■

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Nutrition and Aging of the Heart

Jeffrey H. Rudell, M.D.*

Ladies and gentlemen, I am grateful for this opportunity to share with you some personal thoughts regarding nutrition, health and aging of the heart. These are serious subjects, particularly in this day and time, with more people acutely aware of what they eat, how they look and feel and the overwhelming national concern with heart disease.

Many of my comments will be in the form of suggestions, or maybe I should say "helpful hints," which may be of benefit to you in planning an exercise program or deciding what you will eat. It is my aim that these will be applicable to each and everyone.

The Process of Aging

Mental and physiological changes are commonly associated with aging. Mental changes are commonly secondary to aging of the heart, rather than aging of the brain. A primary function of the heart is to act as the elevator that brings oxygen-carrying blood to the brain. Without the right amount of oxygen pumped to it, the brain does not function properly. Some symptoms of altered brain function are confusion, forgetfulness and inappropriate behavior.

The amount of work that the heart must do to keep the brain going is considerable. At a heart rate of 84 beats per minute, a heart beat pumping 2 ounces of blood gives a cardiac output of 8 tons per day at rest. About 15 per cent of the cardiac output goes to the brain, or 2.2 tons per day at rest.

To get the blood from the apex of the heart to the top of the head, about 1½ feet away, requires several thousand foot pounds of work per day. These calculations are approximate and vary with the amount of activity and bed rest that the person gets. Thus, a healthy condition of the heart is necessary for optimal mental health.

The Coronaries

The anatomical site of most effects of aging of the heart is the coronary arteries. The coronaries lie under a cover of fat and on a bed of heart muscle, the myocardium. The right and left coronary arteries supply the heart muscle with oxygen and nutrients. When their walls age, they become thickened with deposits of cholesterol and calcium. When they thicken, they do not respond to demands made on them to enlarge and supply more blood during exercise.

The lumen of the blood vessel—the center—becomes irregular and smaller. This interferes with blood flow by causing turbulence or eddy currents which keep the blood from flowing in a true path. The artery may also become completely blocked by this debris. Blockage and immobility of the coronaries in aging is common and alarmingly so in young men. The results are disability due to chest pain when exercising and feeble contractions of the heart. Death from coronary occlusive disease is a plague of the 20th Century.

The XO Enzyme

The deposits on the coronaries consistof cholesterol and calcium. Cow's milk accounts for a major amount of cholesterol and calcium in the diet. There is also XO (xanthine oxidase) in milk which is the main culprit causing aging of the coronary arteries. XO is an oxidative enzyme present in milk, mainly in the cream, but also in the rest of the milk. The cream is also high in cholesterol.

When milk is raw, it separates on standing overnight into three distinct layers: heavy milk solids on the bottom, water and cream on top.

When milk was ladled from the can, before milk cartons became popular, the midmorning shopper got less than his money's worth of cream and milk solids. Homogenization, one of two commercial processes that raw milk is subjected to, breaks up the globules of cream. Ultra-microscopic-sized droplets of fat are formed. These stay dispersed evenly throughout the milk. This is advantageous to the commercial distributor.

On the other hand, is homogenization advantageous to the consumer? Homogenization is detrimental to the consumer for the following reason. Reducing the size of the fat globules increases the total surface area of the particles of cream. Thus, the enzyme XO exerts its effects more strongly. XO is not affected by the process of digestion. The effect of XO in the body is to oxidaze plasmalogen, and thus destroy it. XO also plays another role in the biochemistry of the body. It is the enzyme known to be responsible for gout.

Plasmalogen is present in phospholipid membranes of brain, muscle, arterial wall, especially in mitochondria. Some plasmalogen is actually lecithin. The chemical name for plasmalogen is phosphatidal ethanolamine; for lecithin, the chemical name is phosphatidyl choline.

The phosphatide is basically a three-carbon molecule holding together two saturated straight carbon chains by oxygen links, plus a phosphate group. (See chart). XO attacks the phosphatide. When its activity is increased by homogenization, its attack is more devastating. It destroys the integrity of the coronaries.

Coffee and Alcohol

Other everyday beverages that can pose problems are coffee and ethanol. Coffee is high in caffeine, which can accelerate the heart rate. In susceptible people, it may increase cardiac work enough to cause chest pain. Its stimulating effects may cause arrhythmia. Individuals with

*Family physician, Community Hospital, Tallassee, Alabama. Presented at the Nutrition For Total Health meeting, October, 1975, in Montgomery.

a sensitivity to caffeine should avoid it. Decaffeinated coffee is permissible so long as it is low in sodium for individuals on a restricted diet. Iced or hot coffee should be avoided by individuals with heart disease as extremes of temperature may provoke angina pectoris.

Ethanol, or what the average person calls alcohol, is an aging chemical factor. If an individual finds it necessary to partake of alcoholic beverages, he should avoid exercising while under the influence. Exercising while intoxicated can dilate your heart. Also, alcohol slows autonomic reflexes as well as voluntary reaction time. In addition, ehtenol raises the level of triglycerides in the blood and causes inflammatory changes in the muscles of the body as well as the heart.

Heart Attacks

Remember the time-worn adage about "an ounce of prevention..."? Allow me to offer some "ounces" to you of ways to decrease your chances of having a heart attack. Avoid cigarette smoking. It robs the heart of oxygen. Cigarette smokers show a higher red blood cell count than nonsmokers and this increases the tendency of the blood to sludge and cause a blockage in the heart. Don't let a multi-million dollar advertising campaign fool you! Cigarette smoking causes premature disability and death in most individuals who try it.

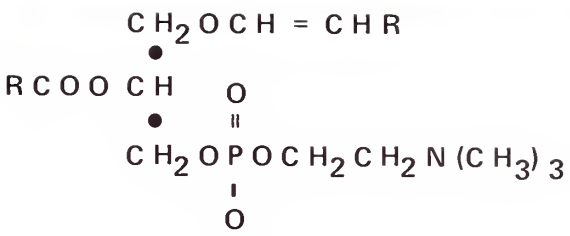
During a heart attack, the heart may not be doing sufficient work to push the blood up to the brain. At this point, you should keep your head lowered to avoid loosing consciousness. Not every chest pain is angina. Nor does every attack of angina signal a heart attack.

Physicians Wanted

General Surgeon: Thuss Clinic needs General Surgeon interested in trauma and hand surgery.
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Surgeon's Assistant: Thuss Clinic needs Surgeon's Assistant interested in trauma.
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The First American-German Postgraduate Medical Congress

The First American-German Postgraduate Medical Congress will take place between December 26, 1975 and January 9, 1976 at the Holiday Inn, Nassau, followed by a Caribbean cruise. Fifteen qualified University Professors from the United States and Germany, all bilingual, will participate in teaching seminars recommended for practicing physicians, internists, cardiologists and family physicians. Further details may be obtained by writing to: S. Heyden, M.D., Department of Community Health Sciences, Duke University Medical Center, Durham, North Carolina 27710.



FORMULA FOR PLASMALOGEN

After the heart attack, you should be supervised by your physician as to activities, diet, medication and laboratory evaluation. The heart mends itself after a heart attack, but the circulation of the heart remains poor.

Non-Coronary Heart Attacks

There are two types of athletic heart: Symmetrical and asymmetrical. In the symmetrical type, the examination of the heart is normal except that it weighs too much. In this situation, the increased amount of myocardium is spread evenly throughout the heart.

In the other type, only a portion of the heart is enlarged. It is a localized portion. This is the more serious of the two types of athletic heart. The localized increase in heart tissue may obstruct the flow of blood out of the heart and may cause fainting or sudden death. Clinical examination of the heart by listening with the stethoscope while the patient is straining may reveal a localized murmur that is not otherwise present. Other studies may be needed to confirm the clinical significance of this physical finding.

High blood pressure over a period of time will cause changes in the heart and circulation that are typical. High blood pressure and a poorly functioning heart go together.

Saturated fats are bad for the heart. They contribute to coronary artery disease. "Please tastebuds, harm the heart" is an aphorism that holds true above all in the long run.

A Prevention Prescription

A suggested plan to help keep one in shape and healthy may include the following: (1) Eliminate overly processed foods from your diet. (2) Keep your weight down to the normals recommended by life insurance statistics. (3) Take vitamin supplements or eat fresh garden vegetables grown on adequate soil to ensure they have adequate vitamin and mineral content. (4) Avoid preservatives. (5) Exercise. Deep breathing exercises are highly recommended.

The amount of exercise that an individual needs varies with his age and physical condition. You might ask your doctor to outline your limitations and evaluate how much you are doing already. Increases in your daily exercise should be planned over a period of 4-6 weeks. This should be accompanied by a modification of your life style.

First and foremost, the goal of your exercise program should be to improve the efficiency of your heart and lungs. ■

TA For Physicians: Psychological Games

Taras J. Cerkevich, Ph. D.*

Fourth In A Series

The Origin and Purpose of Games

In the previous installment of this series (Journal, October, 1975, Vol. 45, No. 34, p. 36), stroking hunger and time structuring were considered. It was stated that parents dispense various forms of stimulation to their progeny. Some of this stimulation is pleasant (strokes), some is negative (discounts) and some does not stimulate the individual at all (neglects).

In the course of development, the individual takes a position in life. This position consists of an identity (I'm OK, or I'm not OK) and a decision about the world (You're OK or You're not OK).

There are four possible basic positions:

1. **I'm OK–You're OK.** This is the original position of the child. Some individuals manage to keep this position; most don't. The motto of this position is that, "Life is great". It is a position conducive to growth and creative problem solving.
2. **I'm OK–You're not OK.** The basic motto of this position is "Your life stinks." This is the attitude found in moralists, many criminals and psychopaths, and psychotherapists. People in this position try to prove how horrible and stupid everyone, excluding themselves, is.
3. **I'm not OK–You're OK.** The basic motto of this position is "My life stinks." This is the attitude carried about by depressed people who complain that they feel inferior yet glow in their failures. People in this position try to prove how horrible and stupid they are.
4. **I'm not OK–You're not OK.** The basic motto of this position is "Life stinks." This may be termed the schizoid outlook on life. These people find no pleasure in life. To them, the world and their own lives are objects of repulsion. Withdrawal and, in extreme cases, suicide are this individual's mode of dealing with life.

As an individual develops, he or she develops a life program (script) that is designed to prove the individual's position. This life program is advanced to it's ultimate payoff by means of psychological games.

The Nature Of Games

All psychological games follow the formula:

$$C+G = X \rightarrow P$$

Verbally, this formula says that two players, a Con and Gimmick, get together, engage in some interpersonal behavior (=) until there is a cross-up (X) and both leave with their payoffs (P).

Cons and Gimmicks recognize each other through "sweatshirt messages." Potential victims seek out rescuers and persecutors by sending out "I'm not OK" messages in their gait, dress, posture, faces, while potential rescuers and persecutors attract victims by sending out, "You're not OK" messages.

Figure One illustrates the action of a common consulting room game called "Help" often played by professionals, especially physicians and mental health workers. The Con in this game is the patient (or consultee) who is out to prove that, "You're not OK" by playing "Nobody can tell me what to do" and "I'll show you."

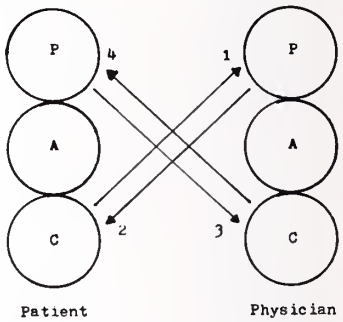


FIGURE 1. An illustration of the formula for psychological games: C + G = X - P.

1. "Doctor, can you help me?"
2. "Why, of course, I can help you."
3. "Well, what makes you think you're so much better than all the other doctors I've seen?!?!
4. "You don't need to get angry! I was only trying to help you!"

The Gimmick in this game is the physician, psychologist or lawyer who is out to prove that, "I'm not OK" by playing a mixture of "I was only trying to help you" and "Nobody appreciates me."

The Con begins the game by coming on with a hurt, victimized look on his face, a whining voice and asks "Doctor, can you help me?" The Gimmick retorts in a "reassuring", rescuing tone of voice by saying, "Why, of course, I can help you." The formerly victimized Con now switches to a persecuting manner and angrily asks, "Well, what makes you think you're so much better than all the other doctors I've seen?" The Gimmick now assumes a pitiful, victim role and replies, "Well, you don't need to get angry with me. I was only trying to help you."

What has happened here? The patient who originally came on as a poor and helpless Victim hooked into the physician's Rescue gimmick and conned the physician into a game where the physician wound up as the poor and helpless Victim and the patient wound up as a nasty Persecutor.

In psychological games, the players switch between the roles of Rescuer, Persecutor and Victim. Victims set up Rescuers for future Persecution. Rescuers set up Victims for future Persecution. Rescuers and Persecutors set themselves up for further Victimization, thereby gaining justification for further game playing. And so the cycle continues!

Games are played in three degrees. In **first** degree games,

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both players isolate themselves in negative feelings. The example given above (Help) is a first degree game. Both players isolate themselves in anger and frustration. If the Con were not satisfied with his or her performance in "Help", he or she might now switch to "I'll show you (ISY)". In the first degree ISY, the Con might slap the Gimmick with a malpractice suit. If the Gimmick were not satisfied with his or her performance in "Help", he or she might now switch to "Nobody appreciates me (NAM)". The Gimmick might socialize with an associate and exchange complaints about "ungrateful" patients and the high cost of malpractice insurance.

In **second** degree games, one or both players engage in some type of destructive behavior, such as divorce, property destruction, impulsive quitting from a job and the like. In this illustration, a second degree ISY player might suddenly throw a temper tantrum in the Gimmick's office and destroy some expensive equipment whereas the second degree NAM player might go on a drinking spree, neglect his practice and finally drop out of the medical profession.

Third degree games involve some type of tissue destruction—either murder or suicide. Thus the third degree ISY player might wait for the Gimmick to go home that evening and as the Gimmick is crossing the street, the Con might try to run over him. The third degree NAM player, might decide that he is useless and a failure and that "...there is no point in going on..." and kill himself.

Although, only three games were mentioned here, Eric Berne[1] himself recognized a number of different games. Games may be classified either as "You're not OK" games (Yes But, Let's you and Him Fight, Corner, Rape, See What You Made Me Do, Courtroom, etc) or I'm not OK games (Kick Me, Stupid, Poor Me, Wooden Leg, Harried, Schlemiel). The games advance the script to the ultimate payoff.

Stamp Collecting in Psychological Games

Games are motivated out of a need to collect "stamps". Psychological stamps are the unpleasant feelings that arise out of game behavior. Stamps come in different colors: blue for depression, red for anger, yellow for anxiety, green envy, purple for suffering, white for self righteousness, brown for stupidity, grey for inadequacy and black for suicide.

Some stamps are for real, i.e. the game player really does feel stupid, inadequate or depressed as the result of some ineffective transactions. Some stamps are counterfeit, i.e. the game player really does not feel stupid, inadequate or depressed, but rather wants to feel that way and so imagines or manipulates others into making him feel bad ("If it weren't for you...it's all your fault".)

Game| playing and stamp collecting follow a vicious cycle. The game players, both the Con and the Gimmick, want to prove their life position (cf. supra). To do so, they need to play games. In the course of game play, stamps are collected. Psychological stamps are used in the same manner as trading stamps, i.e., they are used as justification for unhealthy behavior and traded in for such payoffs as temper tantrums, drinking sprees, drug abuse, suicide attempts, divorces, affairs and the like. Once the negative behavior is emmitted, then the individual has reinforced his or her position in life and the cycle begins again.

Breaking Games

People often get into game patterns from which they feel they cannot escape. Some people collect so many stamps that they regard depression, stupidity, inadequacy and other unpleasant feelings as a predetermined, unchangeable part of life. Subsequently they get hung up on being "well adjusted" ("My husband is such an SOB, but at least I've got a nice family, so I won't ask for a divorce") and "coping"("Oh well, it could have been worse, so I'll just put up with it").

Instead of becoming **well adjusting** and responding effectively and doing something to feel happy, a lot of people try to smile while they are reading a book piled up to their neck in garbage. Instead of cleaning off the trash for fear that no one will like them because they refuse to play games, a lot of people are willing to settle for a boring job, ("'..at least the retirement is good.."), a lackadaisical coworker ("'...at least he does what he's told..."), a mediocre therapist (..."he's nice..."), or an apathetic spouse ("...we never say much to each other, but at least we don't fight..."). However, people who have studied TA realize that a game free existence is much happier than one where individuality and effective living are imeded.

For those who want to give up games, there are five easy steps to follow:

1. Education. This requires learning about games and knowing how they operate. Berne's book[1] is highly recommended in this area.
2. Learn one's individual role and the role of the other player. This means that the individual who wants to stop playing games needs to ask which roles he and the fellow game player are assuming, whether these roles be of Persecutor, Victim or Rescuer.
3. Cathect over Child impulses and Parent dogmas with the Adult ego state. The game free individual assesses not only the Cons or the Gimmick's behavior, but also examines his or her own motivations and cathects over both Child and Parent manipulations, impulses, "shoulds" and emotions.
4. Point out to the other individual what is going on and tell them, "I refuse to let you make me feel guilty...angry...hurt...dumb"
5. Point out to the other individual healthy effective ways of handling things, e.g., "Instead of blaming each other like children, let's both of us search for solutions to the problems." The use of these five steps can be illustrated by going back to the example given earlier in this article. In (a) of **Figure 2** a game free patient confronts a physician.

Thus, the patient who has studied Eric Berne's[1] book has become aware of how he or she manipulates others by coming on Victim and then Persecutor (Steps 1 and 2). The person has therefore cathected with the Adult over his Child impulse to prove that "people are fools" and says, in an Adult to Adult manner "Doctor, I have a number of problems that make me feel very depressed, what can be

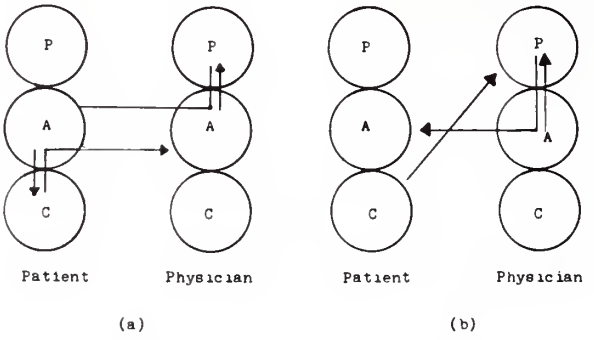


Figure 2. DE-GAMING. In (a), a game free patient confronts a physician and asks, "What can I do?" The game free physician replies, "Tell me more." In (b), a game free physician. The patient asks, "Can you help me" and the game free physician says, "No."

done to change this?" (Step 3). The game free physician cathects with the Adult over his Parent urges to "help" and says, "I don't know. Tell me some more."

The physician who still plays games, on the other hand, may continue to offer "help" in a very Parent manner, but by pointing out that he wants action and not reassurance (Steps 4 & 5), the game free patient can try to get the physician to act Adult. If acting Parent is too deeply ingrained in the physician, the patient can find another physician who does act Adult (steps 4 and 5).

In (b) of **Figure 2** a game free physician confronts a patient. The patient may try to Con the physician with a Victim-like, "Can you help me"? The physician then realizes that he or she is being set up (Steps 1 and 2), cathects over his Parent urges to "help" (Step 3) and says, "No, I can't help you" (Step 4) and also adds, "But if you could explain the situation, maybe the two of us could work together and come up with an effective solution. What do you think?" (Step 5). The physician is now hooking the patient into speaking in an Adult manner.

Game playing can be stopped. Those who stop playing games can become winners, but those who continue to play games, although they play to win, remain losers.

References:

1. Berne, Eric, Games People Play, New York: Grove Press, 1964
2. Steiner, Claude, Games Alcoholics Play, New York: Grove Press, 1971

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***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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Do we really want quality health care in Alabama?



A former Public Health Officer for Sumter, Greene, Pickens, Marengo and Tusealoosa counties, Dr. Williams now resides in Livingston, Alabama. He is a member of MASA's College of Counsellors and serves as an officer in the Sumter County Medical Society. The opinions expressed here reflect those of the author. They do not necessarily reflect those of the editorial review board of this Journal.

SIDNEY J. WILLIAMS, M.D., M.P.H.

During the past ten to fifteen years, endless numbers of words have been and still are being uttered and breasts sorely beaten upon urging improvement of health care delivery to the people in rural Alabama. Surveys have been made and published in such abundance that if they were stacked one on top of the other the resulting pile would probably exceed two feet in height. Repetitive and many times statistically non-significant figures have been cited. There is a need – it requires no additional documentation. It cries for action and relief.

However, except for the family practice program at the University of Alabama College of Community Health Sciences and the establishment of the School of Medicine at the University of South Alabama, there appears to be a "be damned if you try to improve services" attitude in certain high places. Recently, there was an Emergency Medical Technician training course conducted in Livingston from which 15 passed the State Board Examination. Until something is done to increase the physician and nursing coverage, this EMT program will be hampered.

Livingston University, despite many objections from the big boys, finally managed to get approval for the Ira D. Pruitt School of Nursing. After much searching, a most competent and experienced individual was recruited to head this school; namely, Dagmar E. Brodt, RN, PhD. Dr. Brodt then set out to recruit a faculty with the support of the physicians and hospitals in Sumter, Marengo, Greene and Pickens counties. Prior to admission of the initial class of nursing students, Mr. Fred Brodt, husband of Dr. Brodt, was appointed director of administration, research and media for the nursing division. He brought extensive experience to this position.

Presently, both an upper level and a beginning class of student nurses are engaged in classwork and clinical experience. Once again the physicians, hospitals, public health clinics and nursing homes from this area are participating with Livingston University. The first class will graduate from their 125-quarter credit course in August, 1976. They will complete their training with a tailor-made experience in the nursing specialty of their choice. This will help them step into full-time employment as registered nurses with competence and confidence.

This program and these students, mainly from this catchment area, will do much to relieve the nursing shortage. Efforts like this should be encouraged and supported by all who really want quality health care in rural Alabama.

Two examples show the attitude of people in high places toward the health needs of the rural areas. I took Mr. Brodt to the first "Physician Recruitment for the Rural Areas" workshop, which was held by the Medical Association of the State of Alabama in Montgomery. At that meeting, I introduced Mr. Brodt to Dr. Margaret Klapper, Director of the Alabama Regional Medical Program.

In the conversation, I told Dr. Klapper that Mr. Brodt's wife was attempting to recruit qualified nursing faculty. Her immediate reply was something like "tell her not to try to get anyone in Birmingham." Thereupon, I reminded her that she was working for the improvement of health of the entire State – not just Birmingham or UAB.

A review of the actions of the ARMP shows the virtually complete bias toward the metropolitan areas of the State. A proposal to ARMP which would have tied the splendid nursing audiovisual library and technical competence to the training needs of about 30 small health care facilities in west central Alabama got no support on the basis that this area has too few hospital beds. With attitudes like these, pervading certain high places, the hope for quality health care in rural Alabama is rather discouraging.

Despite the road blocks, Livingston University *did* get a faculty and *did* arrange for area-wide clinical experience for its first class which started a year ago. About 30 of these nursing students satisfactorily completed the first three of seven quarters. Rural Alabama has had a severe and persistant shortage of registered nurses. There has been a crying need for more nurses, and now even more will be needed to staff the expanded facilities in Sumter and adjacent counties. (Four of the present students are at this nursing school on scholarships, three provided by the Pickens County Commission and the other by the Bryan Whitfield Memorial Hospital, Demopolis).

It is one of the facts of life that students from the rural areas going to large metropolitan centers for training, in general, do not return to their home areas upon graduation. Sometimes, this is due to lack of jobs in the field of training, but this is not true in nursing or medicine. So far, attempts to make capitation grants for nursing education

contingent upon service in grossly understaffed areas have been defeated.

Sumter County has built and equipped two hospitals with a total capacity of 110 beds and a modern nursing home of some 80 beds. Approval has been given for a substantial additional number of nursing home beds. Pickens County is constructing a 57-bed hospital and Marengo County is greatly expanding its hospital to regional status. We have active professional (medical), political and civic support in addition to support from institution administrators in these counties.

I am writing this to the physicians of Alabama, many of whom I know and who are my friends. Having served as an elected delegate from this congressional district to the Board of Trustees of MASA (I served five years), and knowing that it is the earnest desire of organized medicine to see that the health care needs of all Alabamians including those of the rural areas be met, and having fought for the principles of the high quality of rural health care, I am more than riled that there are those who still wish to obstruct and frustrate our efforts. If there are any "doubting Thomases", please refer to the large file which the State Board of Censors has accumulated over the past several years on our efforts at the local level to obtain quality health care for rural Alabamians and to keep out unqualified people and programs. The Board of Censors has given full cooperation to our efforts. ■

Rural Health Week Plans Underway

The week of April 4 has been designated National Rural Health Week, as part of the nation's Bicentennial. Sponsored by the AMA in conjunction with the American Dental Assn., American Hospital Assn., American Veterinary Medical Assn., U.S. Depts. of Agriculture and HEW, and the National Safety Council, the week will coincide with the 29th National Conference on Rural Health in Phoenix, April 8-9, 1976. In December, the AMA will mail National Rural Week Community Action Kits to state and non-metropolitan county medical societies. ■



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ALBRIGHT, John Delbert, b 37, mc Univ. Oklahoma 62, recip. 3009 Evans Drive, Dothan 36301. P.

DuBOSE, Edward McDonald, Jr., b 47, mc Univ. S. C. 72, recip. NBME 74, 32 Crane Street, Ft. Rucker 36360. GP.

HARRELL, Robert Ronnie, b 42, mc Univ. Miami 68, recip. Ga. 70, 509 West Main Street, Dothan 36301. Opht.

MARGOLIES, Martin Emil, b 43, mc New York State 69, recip, NBME 70, 509 West Main Street, Dothan 36301. Opht.

MAZYCK, Earle Farley, b 45, mc Univ. Va. 71, recip. Va. 71, 1920 Fairview Avenue, Dothan 36301. I.

McCLINTOCK, Richmond Charles, Jr., b 44, mc Univ. Ala. 69, recip. NBME 70, 1912 Fairview Avenue, Dothan, 36301. S.

PAGE, Russell Lee, Jr., b 42, mc Kansas City College 71, recip. Missouri 71, % Flowers Hospital, P. O. Box 1249, Dothan 36301. Osteo.

SAWYER, James Adolph, III, b 42, mc Univ. Ala. 70, recip. NBME 71, 509 West Main Street, Dothan 36301. C.

SHELOR, William Cornelius, Jr., b 41, mc Univ. Ga. 67, recip. Ga. 68, 1908 Fairview Avenue, Dothan 36301. U.

WELLS, Theron Wayne, Jr., b 44, mc Univ. Ala. 69, sb 75, 211 West Main Street, Dothan 36301. Opht.

JEFFERSON COUNTY

CUBAS, Ignacio J., b 30, mc Univ. Mexico 57, Limited Lic. 73, 1919 Seventh Avenue, South, Birmingham 35233.

LAUDERDALE COUNTY

STEPHENS, David Bolam, b 44, mc Tulane 68, recip. La. 68, P. O. Box 798, Florence 35601. S.

STONECYPHER, William Bratton, b 39, mc Univ. Ala. 66, sb 67, 2111 Cloyd Blvd., Florence 356300. C.

LEE COUNTY

FREEMAN, Richard McConnell, b 41, mc Univ. N.C. 70, recip. N.C. 71, Medical Arts Center, 121 N. 20th Street, Opelika 36801. Pd.

HUNTER, Elizabeth Darlene Loucks, b 24, mc Southwestern 49 recip. Texas 49, Univ. Health Service, Auburn Univ., Box 109, Auburn 36830. Anes.

HUNTER, Tom Remegius, Jr., b 18, mc Univ. Texas 44, recip. Texas 44, Univ. Health Service, Auburn Univ., Box 109, Auburn 36830. S.

MOLITOR, John Thomas. b 43, mc Univ. Oregon 69, recip. NBME 70, 212 Dial Street, Ft. Benning, Ga. 31905. I.

OLESON, Dunlap Wrisley, b 22, mc Univ. Chicago 46, recip. Illinois 47, Student Health Service, Auburn Univ., Auburn 36830. Pd.

TURBERVILLE, Fred Morton, b 16, mc Washington Univ. 43, recip. Missouri 43, Student Health Service, Auburn Univ., Auburn 36830. Pd.

MADISON COUNTY

HULL, Richard Porterfield, b 45, mc Univ. Mississippi 71, recip. Mississippi 71, 105 Rands Avenue, Huntsville, 35801. N.

MOBILE COUNTY

FONTENOT, Joseph LaRose, b 38, mc LSU 62, recip. La. 62, 1720 Springhill Avenue, Suite 421, Mobile 36604. I.

HOWELL, John Blanch, III, b 42, mc Univ. Mississippi 68, recip. Mississippi 68, 1701 Springhill Avenue, Mobile 36604. Ob-Gyn.

PIERCE, Charles Harmon, b 34, mc Univ. Saskatchewan 68, recip. Minn. 72, 4592 Hawthorne Place, Mobile 36608. S.

MONTGOMERY COUNTY

ALLEN, Robert Paul, b 45, mc Harvard 71, recip. NBME 72, 543 Lurene Circle, Montgomery 36109. GP.

BHUTA, Ishwar, b 42, mc M.G.M., Indore, India 64, recip. Maine 72, 347 South Ripley Street, Montgomery 36104. S.

CARROLL, Richard Charles, b 34, mc Univ. Missouri 67, recip. Missouri 67, 1722 Pine Street, Montgomery 36106. ALR.

CHESTER, Thomas Jay, b 29, mc Stanford 73, recip. La. 73, State Office Building, Montgomery 36130. Public Health.

CONNELLY, David Meckel, b 29, mc Temple Univ. 54, recip. Del. 55, Suite 505, 1722 Pine Street, Montgomery, 36106. PI.

GAYDEN, Lewis Ruben, Jr., b 42, mc Univ. Ala. 68, recip. NBME 69, 750 Washington Avenue, Montgomery 36104. R.

GREENE, Hamp Hunter, III, b 41, mc Univ. Ala. 68, recip. NBME 75, Suite 319 2119 East South Blvd., Montgomery 36111. N.

JOHNS, Calvin Robert, Jr., b 30, mc Howard 62, recip. Ga., 64, 1156 Oak Street, Montgomery 36108. S.

KAPLAN, Michael Alan, b 4, mc Univ. Miami 70, recip. NBME 71, 6059 Monticello Drive, Apt. 2, Montgomery 36109. GP.

RAMEY, James Richard, III, b 39, mc Univ. Louisville 67, recip. Ky. 68, 2007 East South Blvd., Montgomery 36111. Or.

WILLIAMS, Charles Dent, b 46, mc Univ. Ala. 71, recip. NBME 72, 1401 East South Blvd., Montgomery 36111. Ob-Gyn.

PIKE COUNTY

OGBURN, Charles Lawton, Jr., b 47, mc Univ. Ga. 73, recip. NBME 75, 19 Diamond Avenue, Ft. Rucker 36360. GP.

RUSSELL COUNTY

KNELLER, Sheldon, b 42, mc Albert Einstein College 68, recip. NBME 69, 3711 Armour Avenue, Columbus, Ga. 31904. SS.

NORGARD, Michael John, b 42, mc Univ. Wisconsin 69, recip. Wis. 70, 4305 Linda Drive, Phenix City 36867. I.

SLATON, Robert Campbell, b 44, mc Univ. Florida 70, recip. Fla. 73, 616 Perkins Street, Ft. Benning, Ga. 31905. Endocrinology.

SHELBY COUNTY

FOX, John Robert, b 47, mc Univ. Ala. 74, recip. NBME 75, 2752 21st Street, Ensley, Birmingham 35208.

CHANGES OF ADDRESS

CALHOUN COUNTY

REAVES, John E., present Anniston to P. O. Box 2121, Anniston 36201.

COFFEE COUNTY

CROOK, Donald H., present Enterprise to P. O. Box 49, Elba 36323.

CONECUH COUNTY

GALLE, Stanley J., Jr., present Evergreen to 303 Riverbend Drive, Mobile 36605.

CULLMAN COUNTY

WEATHERS, Bobby W., present Hanceville to 113 2nd Ave., N.E., Cullman 35055.

ETOWAH COUNTY

COPEN, Estis G., present Gadsden to 1111 Bellview, Gadsden 35903.

HOUSTON COUNTY

JONES, James M., Jr., present Dothan to P. O. Box 1846, Dothan 36301.

JEFFERSON COUNTY

GANTT, Charles B., Jr., present Birmingham to Rt. 12, Box 674, Westlake Valley, Sanford, N.C. 27330.

GLENN, E. Byron, present Birmingham to 2660 10th Avenue, South, Birmingham 35205.

LOWMAN, Joseph A., Jr., present Birmingham to 2660 10th Avenue, South, No. 401, Birmingham 35205.

McCOY, David A., present Birmingham to 2660 10th Avenue, South, Birmingham 35205.

OLIVER, Robert I., present Birmingham to 801 Princeton Ave., S. W., No. 222, Birmingham 35211.

PITTS, William R., present Birmingham to 2660 10th Avenue South, 2660 Birmingham 35205.

ROY, Barbara J., present Birmingham to 1001 Greenwood Terrace, bessemer 35020.

TURNBULL, Donald C., present Birmingham to 2660 10th Avenue, South, Suite 504, Birmingham 35205.

MADISON COUNTY

SPARKS, J. Ellis, present Huntsville to Ambulatory Care Center, 201 Governors Drive, SW, Huntsville 35801.

MOBILE COUNTY

GASTON, Charles W., present Mobile to 6456-B Hwy. 90 West, Mobile 36619.

SELLERS, William L., Jr., present Mobile to 66 Croydon Road, Mobile 36608.

MONTGOMERY COUNTY

PHILLIPS, Gary E., present Montgomery to 2007 East South Blvd., Montgomery 36111.

TUSCALOOSA COUNTY

DONALD, Robert H., present Tuscaloosa to 2102½ Greensboro Avenue, Tuscaloosa 35401.

NEW TELEPHONE NUMBERS

BARNES, Frances P. S., Montgomery 262-7778
BHUTA, Ishwar, Montgomery 279-9890
CARROLL, Richard C., Montgomery 834-7221
CONNELLY, David M., Montgomery 262-1642
DONALD, Robert H., Tuscaloosa 345-8333
DUBOSE, Edward M., Jr., Houston 255-4635
FREEMAN, Richard M., Lee 749-8121
GAYDEN, Lewis R., Jr., Montgomery 263-0544
GREENE, Hamp H., III, Montgomery 281-7280
HARRELL, R. Ronnie, Houston 793-9564
HOWELL, John B., III, Mobile 438-9816
HODO, David W., Dallas 872-6773
JOHNS, Calvin R., Jr., Montgomery 269-2527
KAPLAN, Michael A., Montgomery 277-3185
KNELLER, Sheldon, Russell 322-4082
MARGOLIES, Martin E., Houston 793-9564
MAZYCK, Earle F., Houston 792-2125
McCLINTOCK, Richmond C., Jr., Houston . . .792-0068
McRAE, Luther C., Jr., Escambia 296-2456
NORGARD, Michael H., Russell 279-8426
OGBURN, Charles J., Jr., Pike 255-2260
PIERCE, Charles H., Mobile 343-0119
RAMEY, James R., III, Montgomery 284-1670
ROY, Barbara J., Jefferson 428-1162
SAWYER, James A., III, Houston 793-9564
SHELOR, William C., Jr., Houston 794-4159
SPARKS, James E., Madison 536-3583
STEPHENS, David B., Lauderdale 764-5351
STONECYPHER, William B., Lauderdale 764-5214
WELLS, Theron W., Jr., Houston 794-8578
WILLIAMS, Charles D., Montgomery 281-0560
McDONALD, Juanita B., Covington 222-1175

MEMBERS DECEASED

BALDWIN COUNTY

James W. Britton, M.D., Foley . . . . . Deceased

JEFFERSON COUNTY

William H. Beddow, M.D., Birmingham . . . . . Deceased (8/27/75)
Thomas K. Lewis, Sr., M.D., Pensacola, Fla. . . . . Deceased (10/8/75)
Lewis G. Woodson, Jr., M.D., Birmingham . . . . . Deceased (05/0/75)

AROUND THE STATE

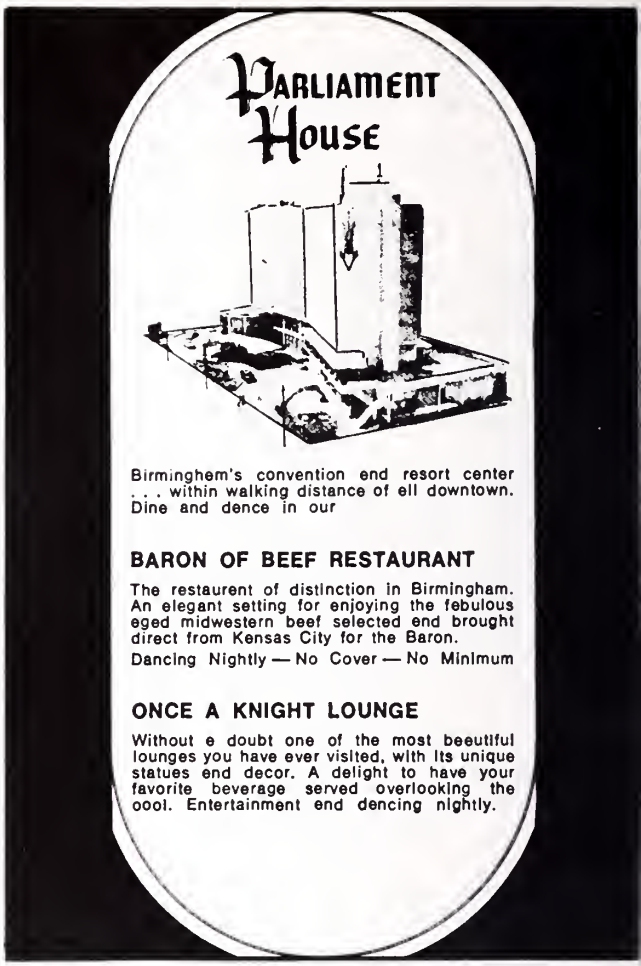
RUSSELL COUNTY
Seth J. Floyd, M.D., Phenix City . . . . . .Deceased

MEMBERS REINSTATED

DALLAS COUNTY
CHAPMAN, Jesse P., b 1885, mc Ala 12, sb 12, 81 Sheridan Road, Asheville, North Carolina 28803. I.
ELMORE COUNTY
HUGHES, Andrew John, b 26, mc Univ. Ala. 63, sb 64, 3156 Clairmont Ave., Macon, Ga. 31204. GP.
JEFFERSON COUNTY
SHAW, June Fore, b 30, mc Univ. Ala. 61, sb 62, 619 19th Street, Birmingham 35223. Path.
MONTGOMERY COUNTY
BARNES, Frances Page Shaw, b 22, mc George Washington Univ. 45, recip. NBME 59, 1722 Pine Street, Montgomery 36104. Pd.

MEMBERS TRANSFERRED

HOUSTON COUNTY
PERRY, Stephen Ross, Cancer Clinic, Southeast Alabama General Hospital, Dothan 36301. From Jefferson County Medical Society.
MONTGOMERY COUNTY
DOUGLAS, George Capers, Rt. 4, Box 70-6C Canyon Road, Wetumpka 36092. From Pickens County Medical Society. ■





Psychiatrists
WILLIAM K. HANEY, M.D.
E. J. PHILLIPS, M.D.

Administrator
JAMES K. ROAN

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A PRIVATE PSYCHIATRIC HOSPITAL

This 64-bed ultra-modern facility offers individualized intensive, yet comprehensive treatment of ematianal disarders. Specifically designed to meet the unique and specialized needs of the emotionally ill patient, the facility also offers treatment of problems invalving alcohol and drug abuse.

The Retreat offers a full range of routine diagnostic, therapeutic, laboratory, x-ray, EKG, EEG and electroconvulsive treatments.

Treatment programs of staff psychiatrists and consultants include occupational, recreatianal, sacial services and tutoring.

The Retreat is a member of: National Association of Private Psychiatric Haspitals; Narth Alabama Regional Haspital Councl; Alabama Hospital Association.

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Physician Placement Service In Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

General Practice: (Family Practice) Age 38; University of Nebraska 1966; seeking associate or group practice. Available January 1976. LW-1/1

Internal Medicine-Pediatrics: Age 28; University of Alabama 1973; National Board; interested in town greater than 10,000 population. Available July 1976. LW-4/2

Internal Medicine: Age 27, Louisiana State University 1974; seeking assistant or associate practice. Available July 1977. LW-4/1

Internal Medicine: Age 33; Georgia 1973; Board eligible; seeking group practice in a college town. Available June 1976. LW-2.

Internal Medicine: Age 32; University trained, board eligible, prefer group practice. Available July 1976. LW-2/2

Internal Medicine-Hematology, Oncology: Age 31; Vanderbilt 1970; Board certified; National Board; seeking associate practice. Available July 1976. LW-2/1

Surgery: Age 31; LSU 1969; completing tour of active duty; seeking associate practice. Available September 1976. LW-8/2

Ophthalmology: Age 28, University of Alabama in Birmingham 1974; Available 1978. LW-10

Ophthalmology: Age 28, Tulane University 1971; Board eligible; seeking solo, associate or group practice. Available July 7, 1976. LW-10/2

Ophthalmology: Age 28; Emory University 1973; seeking solo, associate or group practice. Available July 1977. LW-10/3.

Orthopedics: Age 32; University of Tennessee 1969; Board eligible; seeking solo, associate, group, industrial or institutional practice; Available January 1976. LW-11

Orthopedics: Age 29; State University of New York at Buffalo 1972; Board eligible; seeking associate practice. Available July 1976. LW-11/1

Pediatrics: Age 27; University of Alabama 1973; seeking group practice. Available July 1976. LW-7/1

Pediatrics: Age 31; University of Alabama 1970; National Board; Board eligible; seeking associate or group practice. Available August 1976. LW-7

Pediatrics: Age 28, Temple University 1973; National Board; seeking group practice. Available September 1976. LW-3.

Surgery: Age 32; University of Illinois 1969; Board certified; National Board; seeking solo, associate or group practice. Available August 1976. LW-8.

Surgery: Age 30; University of Florida 1972; Board eligible; seeking solo or associate practice; Available July 1977. LW-8/3

Surgery-Thoracic & Cardiovascular: Age 35; Ohio State University 1966; Board certified; seeking associate or group practice. Available January 1976. LW-8/2

Urology: Age 32, University of Arkansas 1969; Board certified; Available July 1977. LW-9

PHYSICIANS WANTED

(Opportunities For Practice)

Emergency Physician $60,000 for 45 Hr. week; paid insurance, convention; modern 300-bed general hospital.

General Practitioner, Obstetrician-Gynecologist, Family Practitioner needed in progressive coastal community with trade area of 30,000 population. Two man practice located adjacent to an excellent 100-bed hospital. Medical school within 55 miles. Unlimited hunting, fishing, golf, tennis and water sports. PW-1

General Practitioner opportunity in central Alabama town of 4500 population. Within 17 miles north of Montgomery, Alabama. The finest recreational areas in Alabama consisting of 2 large lakes. Newly expanded 69 bed hospital with 8 active staff members. Invitation to visit with expenses paid will be directed to those qualified. PW-4

Group practice opportunity for **General Surgeon.** Seven member clinic seeks a partner to practice general surgery. Community of 10,000+, near Tennessee River, 2 hours from the University Medical Center. New 100 bed J.C.A.H. approved hospital. Free inspection trip, relocation expenses, guaranteed income. PW-5.

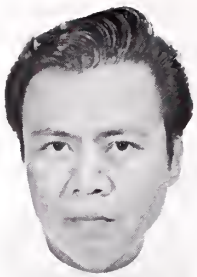
General Practitioner's 2 family physicians wanted for general practice in a 64-bed hospital, located between 2 North Alabama towns (in the heart of the Tennessee Valley) with a trade population of 18,000. Office space available. Within 35 miles of large city. Large amount of industrial work in our area. PW-7

Internists, FP's, Ob-Gyn successful practice assured - 300-bed modern hospital, University affiliated, new connecting office building. All urban advantages for your family - Staff retirements leave immediate patient load - Assistance including 6 months free rent. Guaranteed minimum for right individual. PW-6

Internist wanted in central Alabama town with population of 4500 near large city. Newly expanded 69 bed hospital with new 6 bed intensive care unit. 8 member medical staff. Located within 15 minutes of 2 of Alabama's finest lakes. Invitation to visit with expenses paid will be directed to those qualified. PW-2

Pediatrician wanted in central Alabama town with population of 4500 near large city. Newly expanded 69 bed hospital with an active 8 member staff. Invitation to visit with expenses paid will be directed to those qualified. PW-3

New Physicians Licensed To Practice In Alabama



Fernandez, Conrado Escano, M.D., University of San Thomas (Manilla), 1961. Reciprocity with Pennsylvania (FLEX). Specialty: Pediatrics.



Breedlove, Robert Allan, M.D., University of Oklahoma College of Medicine, 1974. Reciprocity with Oklahoma (FLEX).



Crumpton, Marilyn Elizabeth, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Figarola, Tulio Romulo, M.D., University of Havana Medical School, 1960. Reciprocity with Virginia. Specialty: Preventive Medicine.



Briant, Thomas Paul, M.D., Emory University School of Medicine, 1960. Reciprocity with Georgia. Specialty: Anesthesiology.



Davis, Stephen Alvin, M.D., University of Alabama School of Medicine, 1972. Reciprocity with Virginia.



Gandhi, Dinesh Ramanlal, M.D., B. J. Medical College (India), 1970. Reciprocity with New York (FLEX). Specialty: Internal Medicine.



Byrd, Oliver Wayne, M.D. University of Mississippi School of Medicine, 1974. Reciprocity with Mississippi.



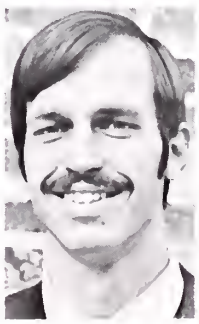
Dugan, John Thomas, Jr., M.D., Creighton University School of Medicine, 1971. Reciprocity with National Board of Medical Examiners. Specialty: Opthalmology.



Gewin, William Charles, M.D., LSU School of Medicine, 1974. Reciprocity with Louisiana (FLEX).



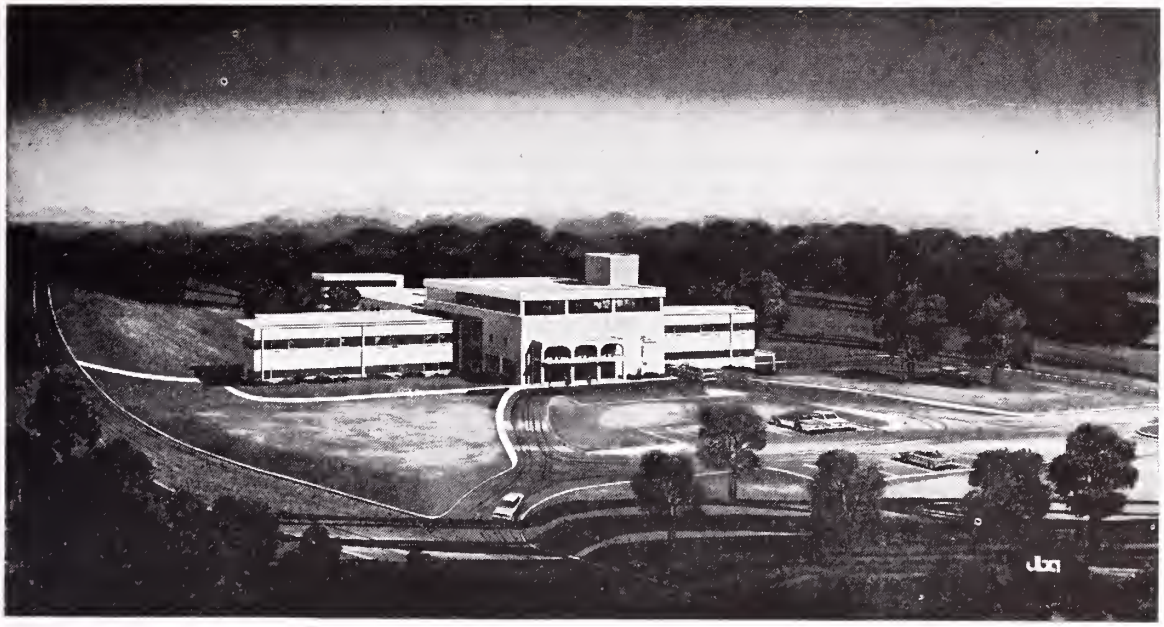
Copley, Donald Paul, M.D. State University of New York at Buffalo, 1970. Reciprocity with New York. Specialty: Internal Medicine.



Featheringill, John Phillip Kemper, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Goldenberg, David Jay, M.D., University of Manitoba Faculty of Medicine, 1972. Reciprocity with Province of Manitoba, Canada. Specialty: Internal Medicine.



HILL CREST HOSPITAL — For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

Medical Director:
James K. Ward, M.D.

Administrator:
Robert V. Sanders

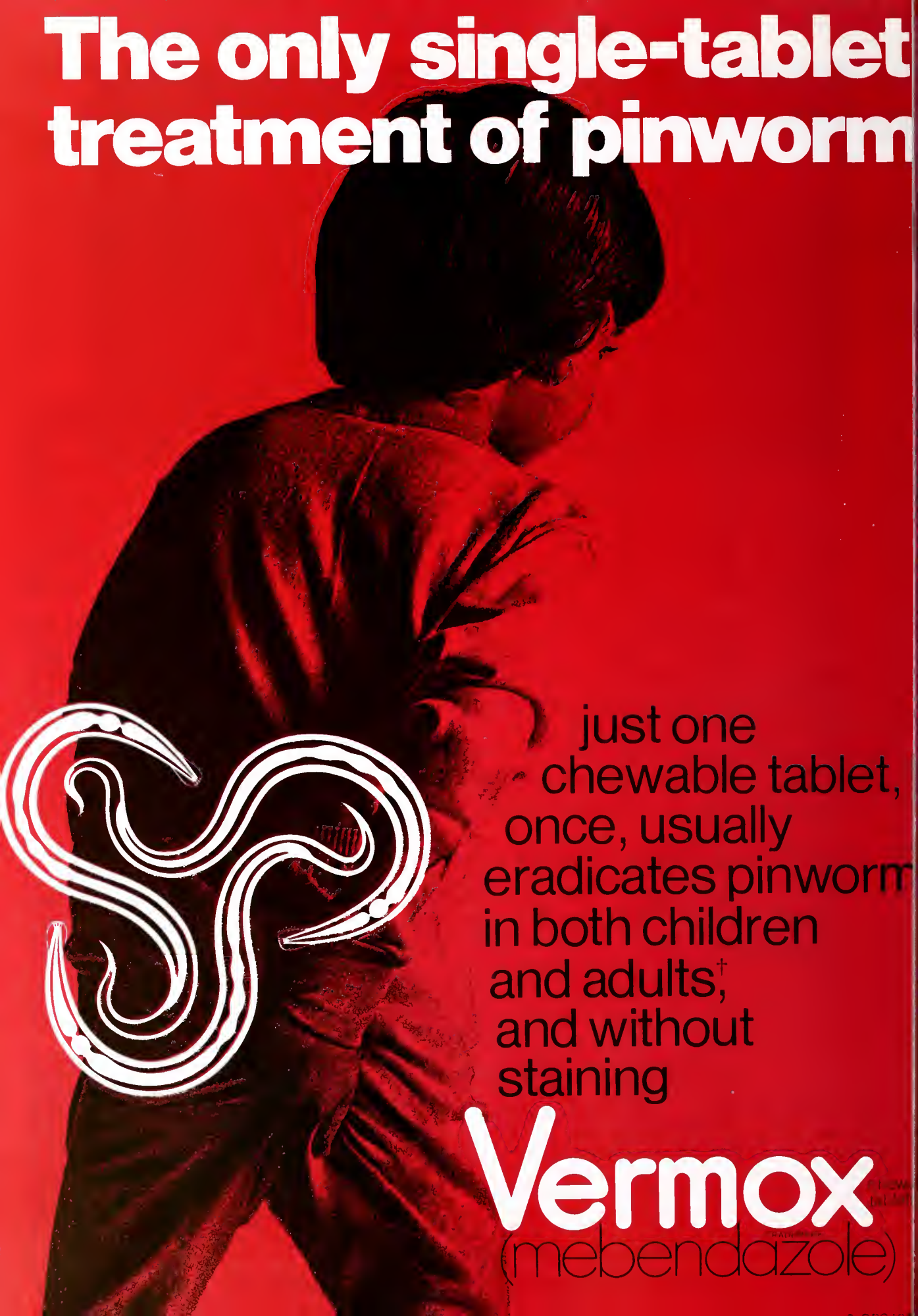
HILL CREST HOSPITAL

HILL CREST FOUNDATION, INC.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

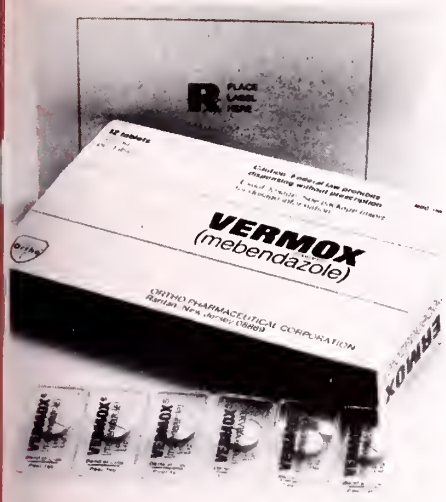
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just one chewable tablet, once, usually eradicates pinworm in both children and adults†, and without staining

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(mebendazole)



Indications Vermox* (mebendazole) is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections.
Efficacy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Trichuris	Ascaris	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	–	(90-100%)
egg reduction mean	93%	99.7%	99.9%	–
(range)	(70-99%)	(99.5-100%)	–	–

Contraindications Vermox is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.
Precautions ***Pregnancy:*** Vermox has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since Vermox may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.
Pediatric use: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.
Adverse reactions Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.
Dosage and administration The same dosage schedule applies to children and adults.
For control of trichuriasis, ascariasis, and hookworm infection, one tablet of Vermox is administered morning and evening on three consecutive days. For control of enterobiasis, a single tablet of Vermox is given.
If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.
How supplied Vermox is available as tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
*Trademark

†Because Vermox has not been extensively studied in children under 2 years of age, the relative benefit/risk should be considered before treating these children. Vermox is contraindicated in pregnant women (see Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

OJ 288-5

Ortho Pharmaceutical Corporation
Raritan, New Jersey 08869

Ortho

Auxiliary

Mrs. William D. Hughes
President



Getting To Know Yourself

Along with the idea of "getting to know you" this year, we need to emphasize the importance of knowing ourselves. When did you have the last eyeball-to-eyeball confrontation with yourself? How many minutes did it take? Did you make a few hasty promises to take better care of face and figure, then grabbed a snack on the way out the door for the next carpool?

For many of us, this seems to be the routine of life. Certainly, it is necessary to get Susie to dancing, and Bobby to football practice; however, if Mama doesn't keep in good health, she won't feel like doing these errands. It is astounding how many women, and men, prolong check-ups with their dentists and doctors. The best medicine on the market today comes under the label of *Prevention.*

Preventive Medicine is within reach of anyone's budget—rich and poor alike. Look in the mirror again—then make that neglected appointment.

Many of the dreaded diseases of today can be cured or arrested if caught in the early stages. One of these diseases is breast cancer. There is much confusion concerning the examination of the breasts that many women have today. Many do not know what time of month, to stand, or lie down, etc. Education is the first step in preventive medicine. Medical Auxiliary workers have been placing a brief, but informative pamphlet in lingerie departments in most of our towns. It is our hope that the customer will take this priceless information home with her and use it. These pamphlets have been made available through the American Cancer Society and MASA.

"The Incredible Machine"—it is our body. If we care for it tenderly, it will serve us long and well. If we neglect and abuse it, leaks will spring, springs will rust, and rusty joints won't jive. Our mental well being derives from a physical well being. ■

Pres.-Elect—Mrs. George Scofield/**1st Vice-Pres.**—Mrs. Lewis Young/**NW District Vice-Pres.**—Mrs. Aubrey Terry/**NE District Vice-Pres,**—Mrs. Eugene Bradley/**SE District Vice-Pres.**—Mrs. Emil Wright/**SW District Vice-Pres.**—Mrs. Charles Weaver. ■

Digest of Actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the November 19 meeting of the State Board of Censors:

- Approved Financial Statement for period ending October 31, 1975, showing receipts of $132,994.83 and disbursements of $62,866.12.
- Approved Budget draft for 1976.
- Approved $50.00 renewal of sustaining membership in the American Medical Student Association.
- Approved Richard C. Whitaker, MASA, and the Chairman of the Legislative Council, or some member of the Legislative Council as designated by the Chairman, attend the Southeastern Legislative and PAC meeting, December 12-13, Atlanta.
- Recommended that the President, President-Elect, Chairman of the Board and Executive Director, MASA, attend the AMA National Leadership Conference, January 22-25, 1976, Chicago.
- Approved endorsement of the Town of Phil Campbell, Alabama, in its application to the National Health Service Corps for placement of a physician and dentist.
- Approved request of William Harold Avant, M.D., Mobile, for replacement as representative to Blue Cross-Blue Shield Committee effective March, 1976, and nominated Charles J. Hollis, M.D., Mobile, to replace Dr. Avant in his unexpired term from March, 1976, to March, 1977.
- Referred request from the Alabama Chapter American Academy of Pediatrics for re-establishment of the State Maternal and Child Health Committee to the Council on Medical Services for its recommendations.
- Referred to the Socio-Economics Council for its study and recommendations the request from Dr. James E. Cameron, Alex City, regarding propriety of Medicaid form.
- Approved request of the AMA to conduct a regional CME program in conjunction with MASA, January, 1977, Birmingham.
- Approved Constitution adopted by the Butler County Medical Society.
- Delayed action on proposed insurance plans recommended by the Socio-Economics Council.
- Approved $250.00 donation to the American Association of Medical Assistants. ■

MASA Annual Awards Nominations

The month of November marks the beginning of MASA's search for recipients of its four Annual Awards to be presented during the 1976 Annual Session in April.

These four awards include the William Crawford Gorgas Award, Samuel Buford Word Award, William Henry Sanders Award and the Douglas L. Cannon Medical Reporter Award.

MASA physicians and county medical societies are urged to consider nominating deserving individuals for these awards. ■

Is there a tablet containing *only* an expectorant and *only* Glyceryl Guaiacolate? YES!



1. Patient acceptable tablet dose.
2. Single entity expectorant.
3. Measured tablet dose.
4. Sugar-free tablet.

An identifiable white, scored tablet which significantly stimulates the secretion of respiratory tract fluid.

HYTUSS TABS

(GLYCERYL GUAIACOLATE 100mg.)



Composition: Each sugar-free compressed tablet contains glyceryl guaiacolate 100mg. **Action and Use:** This preparation utilizes the effective expectorant action of glyceryl guaiacolate which significantly stimulates the secretion of respiratory tract fluid. The increased flow of less viscid fluid favors expectoration and has a demulcent effect on the tracheobronchial mucosa. The primary usefulness of Hytuss Tabs is to promote the change from a dry, unproductive cough to a productive cough. Hytuss is therefore useful in treating coughs due to the common cold, bronchitis, laryngitis, tracheitis, pharyngitis, influenza and the measles. The expectorant action of Hytuss may also provide symptomatic relief in some chronic respiratory disorders when the patient experiences spasms of dry nonproductive coughing. **Precautions:** Extremely large amounts may cause nausea and vomiting. **Administration and Dosage:** *Adults*—1 tablet four times daily. *Children*—6 to 12 years of age; ½ tablet 3 or 4 times daily. HOW SUPPLIED: White, scored, sugar-free, tablet in bottles of 100 - 1,000 - 5,000. **Product Identification Mark:** Hy. **Literature Available:** On request.

Available through all drug wholesalers.

Hyrex

HYREX COMPANY

832 South Cooper
Memphis, Tenn. 38104



THIN 150 MILES OF MOBILE, THERE'S NO COMPARABLE PSYCHIATRIC HOSPITAL.

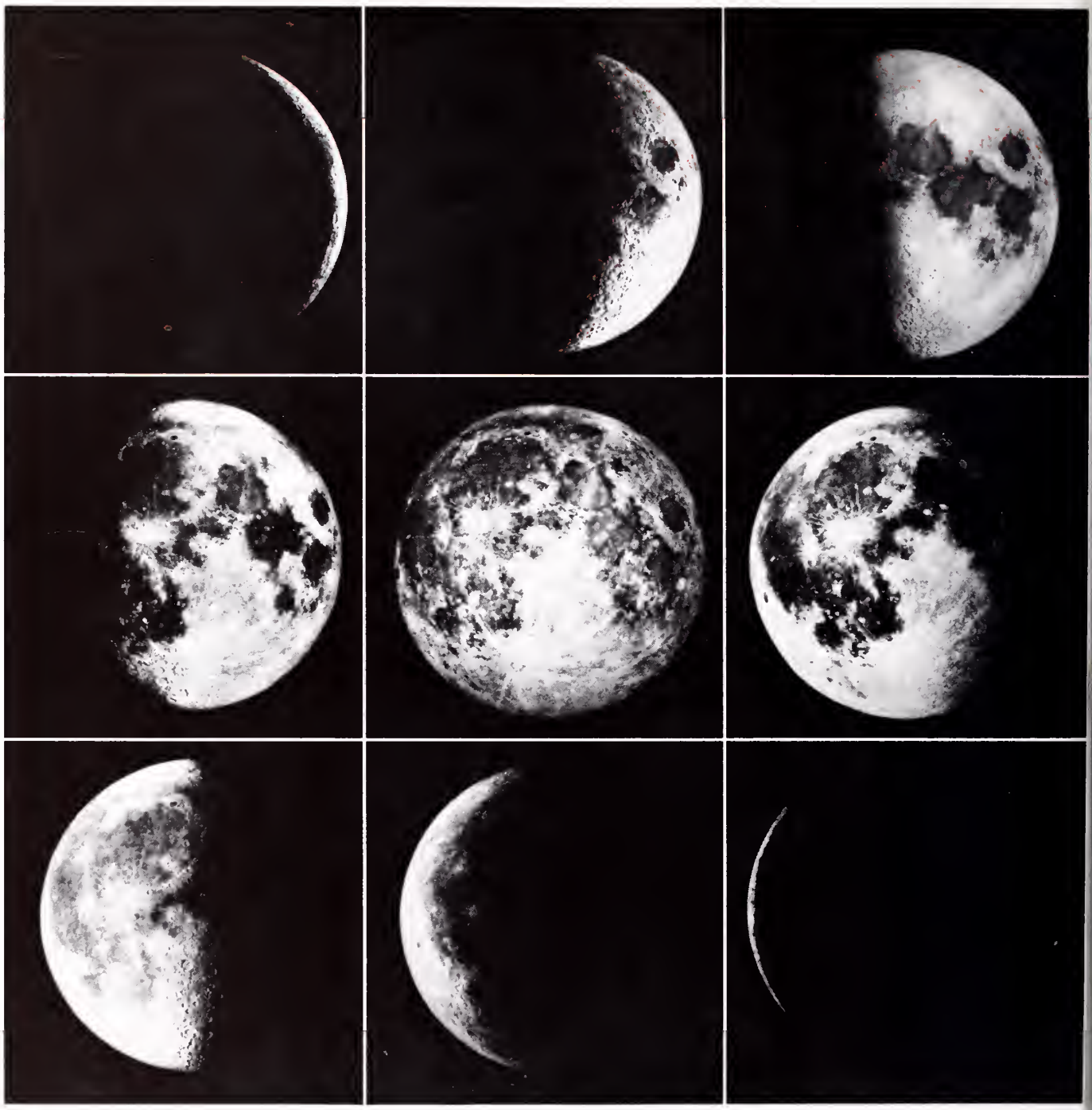
Tranquilaire is now locally-owned and affiliated with the University of South Alabama Medical School.

Our staff of 80 serves 84 inpatients in a modern, informal environment. The hospital is accredited and certified for medicare and is a Blue Cross member hospital.

If you want more information, call or write Robert E. Cole, Administrator. He'll send you our detailed 12-page brochure and answer any questions you may have.



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When sequential contraception is preferred...

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Ortho-Novum SQ provides good cycle control

provides a low sequential dosage

effective in clinical trials, with a pregnancy rate of 0.43 per 100 woman years

generally well tolerated†

available in the unique DIALPAK* Tablet Dispenser

Ortho-Novum SQ

TRADEMARK

Each white tablet contains 0.08 mg mestranol. Each blue tablet contains 2.0 mg norethindrone and 0.08 mg mestranol.



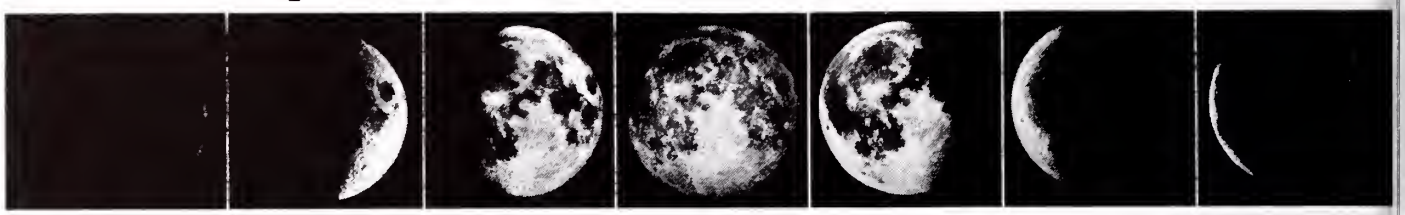
†Serious as well as minor conditions have been reported following the use of oral contraceptives. These conditions include thromboembolic disease. The physician should remain alert to the earliest manifestations of any symptoms of serious disease and discontinue oral contraceptive therapy when appropriate. The physician should be fully aware of the complete Prescribing Information for this product.

*TRADEMARK

See prescribing information on following page.

OJ 622-5

In sequence...



Ortho-Novum SQ Tablets

TRADEMARK

Description: ORTHO-NOVUM SQ Tablets provide a sequential oral contraceptive regimen consisting of white tablets containing only mestranol 0.08 mg. and blue tablets containing both mestranol 0.08 mg and norethindrone 2.0 mg

Action: Gonadotrophin suppression

Special note: Oral contraceptives have been marketed in the United States since 1960. Reported pregnancy rates vary from product to product. The effectiveness of the sequential products appears to be somewhat lower than that of the combination products. Both types provide almost completely effective contraception.

An increased risk of thromboembolic disease associated with the use of hormonal contraceptives has now been shown in studies conducted in both Great Britain and the United States. Other risks, such as those of elevated blood pressure and reduced tolerance to carbohydrates, have been reported and appropriate tests should be conducted to monitor these during oral contraceptive therapy. Liver disease has also been reported, and the physician should be alert to its earliest manifestations.

Long-term administration of both natural and synthetic estrogens in subprimate animal species in multiples of the human dose increases the frequency for some animal carcinomas. These data cannot be transposed directly to man. The possible carcinogenicity due to the estrogens can neither be affirmed nor refuted at this time. Close clinical surveillance of all women taking oral contraceptives must be continued.

Indication: Contraception.

Contraindications: 1. Thrombophlebitis, thromboembolic disorders, cerebral vascular disease, or a past history of these conditions. 2. Markedly impaired liver function. 3. Known or suspected carcinoma of the breast. 4. Known or suspected estrogen-dependent neoplasia. 5. Undiagnosed abnormal genital bleeding. 6. Known or suspected pregnancy.

Warnings: 1. The physician should be alert to the earliest manifestations of thrombotic and thromboembolic disorders, thrombophlebitis, cerebrovascular disorders including hemorrhage, pulmonary embolism and retinal thrombosis. Should any of these occur or be suspected, the drug should be discontinued immediately.

Retrospective studies of morbidity and mortality in Great Britain and studies of morbidity in the United States have shown a statistically significant association between thrombophlebitis, pulmonary embolism and cerebral vascular disease, occlusive or hemorrhagic, and the use of oral contraceptives. There have been three principal studies in Great Britain[1-3] leading to these conclusions and three in this country.[4-7] The estimate of the relative risk of thromboembolism in the study by Vessey and Doll[3] was about sevenfold, while the United States studies found relative risks of 4.4 to 11, meaning that the users are several times as likely to undergo thromboembolic disease without evident cause as non-users.

In May, 1974, the Royal College of General Practitioners in England[8] issued an interim report of its continuing large-scale prospective study comparing a user group to a non-user group. This study in its interim analysis states: "A statistically significant higher rate of reporting of cerebrovascular accidents in Takers is evident, but the numbers are too small to justify an estimation of the degree of risk." The study also reported a higher incidence of superficial and deep vein thrombosis in users as compared to non-users. The risk of superficial and deep vein thrombosis was reported to be lower in women using 50 mcg estrogen preparations.

The Sartwell study[4] indicated that the risk did not persist after discontinuation of administration. Both the Sartwell and the Royal College studies indicated that the degree of risk was not associated with duration of treatment.

In a collaborative American study[5,6] of cerebrovascular disorders in women with and without predisposing causes, it was estimated that the relative risk of thrombotic stroke was 4.1 to 9.5 times greater in users than in non-users. A comparable estimate for hemorrhagic stroke was 2.0.

None of the American studies was designed to evaluate a difference between products. However, the Sartwell study[4] suggested that there might be an increased risk of thromboembolic disease in users of sequential products.

Other retrospective studies[9,10] have reported an increased risk of post-surgery thromboembolic complications in oral contraceptive users. It has been recommended that therapy be discontinued at least one month prior to elective surgery.

2. Discontinue oral contraceptive medication if there is gradual or sudden partial or complete loss of vision, proptosis or diplopia, onset or aggravation of migraine or development of headache of a new pattern which is recurrent, persistent or severe; papilledema, or any evidence of retinal vascular lesions.

3. Fetal abnormalities have been reported to occur in the offspring of women who have taken progestogens and/or estrogens during pregnancy.[11,12] The safety of ORTHO-NOVUM SQ in pregnancy has not been demonstrated. Pregnancy should be ruled out before initiating or continuing the contraceptive regimen. Pregnancy should always be considered if withdrawal bleeding does not occur.

4. A small fraction of the hormonal agents in oral contraceptives has been identified in the milk of mothers receiving these drugs. The long-range effect to the nursing infant cannot be determined at this time.

5. Hepatic lesions (adenomas, hepatomas, hamartomas, regenerating nodules, etc.), occasionally fatal, have been reported in women on oral contraceptives. Such lesions may present as an abdominal mass or with the signs and symptoms of an acute abdomen. These lesions should be considered if the patient has abdominal pain or evidence of intra-abdominal bleeding. This has been reported in short-term as well as long-term users of oral contraceptives.

Precautions: 1. A thorough history and physical examination should be performed before prescribing oral contraceptives and periodically during their administration and should include special reference to breasts and pelvic organs, including Papanicolaou smear since estrogens have been known to produce tumors, some of them malignant, in five species of subprimate animals. 2. Endocrine and possibly liver function tests may be affected by treatment with ORTHO-NOVUM SQ. Therefore, if such tests are abnormal in a patient taking ORTHO-NOVUM SQ, it is recommended that they be repeated after the drug has been withdrawn for two months. 3. Under the influence of estrogen progestogen preparations, pre-existing uterine fibromyomata may increase in size. 4. Because these agents may cause some degree of fluid retention, conditions which might be influenced by this factor, such as epilepsy, migraine, asthma, cardiac or renal dysfunction, require careful observation. 5. In breakthrough bleeding, and in all cases of irregular bleeding per vaginam, nonfunctional causes should be borne in mind. In undiagnosed bleeding per vaginam, adequate diagnostic measures are indicated. 6. Patients with a history of psychic depression should be carefully observed and the drug discontinued if the depression recurs to a serious degree. 7. Any possible influence of prolonged ORTHO-NOVUM SQ therapy on pituitary, ovarian, adrenal, hepatic or uterine function awaits further study. 8. A decrease in glucose tolerance has been observed in a significant percentage of patients on oral contraceptives. The mechanism of this decrease is obscure. For this reason, diabetic patients should be carefully observed while receiving ORTHO-NOVUM SQ therapy. 9. The age of the patient constitutes no absolute limiting factor, although treatment with ORTHO-NOVUM SQ may mask the onset of the climacteric. 10. The pathologist should be advised of ORTHO-NOVUM SQ therapy when relevant specimens are submitted. 11. Susceptible women may experience an increase in blood pressure following administration of contraceptive steroids. 12. Cholestatic jaundice has been reported in users of oral contraceptives. If this occurs, ORTHO-NOVUM SQ should be discontinued. This condition is more likely to occur in patients who have experienced cholestatic jaundice of pregnancy. Patients with a history of cholestatic jaundice of pregnancy should be carefully observed during ORTHO-NOVUM SQ therapy.

Adverse reactions observed in patients receiving oral contraceptives: A statistically significant association has been demonstrated between use of oral contraceptives and the following serious adverse reactions: thrombophlebitis, pulmonary embolism, cerebral thrombosis and hemorrhage, gallbladder disease.

Although available evidence is suggestive of an association, such a relationship has been neither confirmed nor refuted for the following serious adverse reactions: neuro-ocular lesions, e.g., retinal thrombosis and optic neuritis, hepatic lesions with or without intra-abdominal bleeding.

The following adverse reactions are known to occur in patients receiving oral contraceptives: nausea, vomiting, gastrointestinal symptoms (such as abdominal cramps and bloating), breakthrough bleeding, spotting, change in menstrual flow, amenorrhea during and after treatment, edema, chloasma or melasma, which may persist, cholestatic jaundice, migraine, rash (allergic), mental depression, change in weight (increase or decrease), breast changes (tenderness, enlargement and secretion), changes in cervical erosion and cervical secretions, suppression of lactation when given immediately post-partum, rise in blood pressure in susceptible individuals.

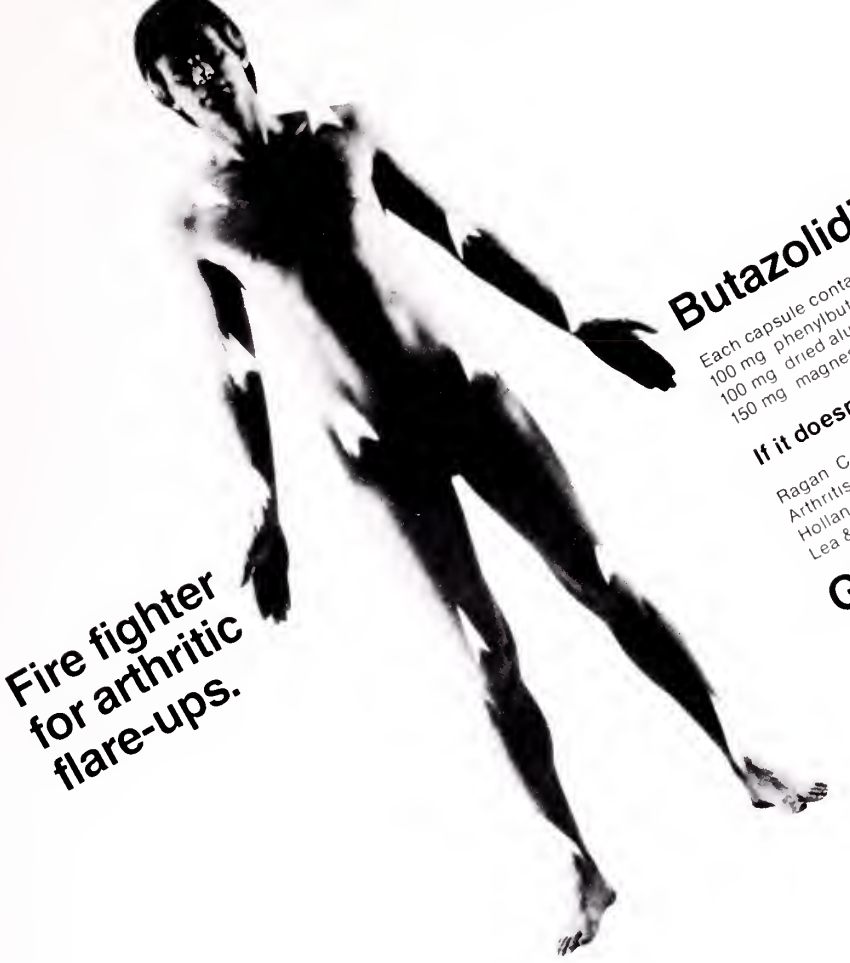
Although the following adverse reactions have been reported in users of oral contraceptives, an association has been neither confirmed nor refuted: anovulation post-treatment, which tends to occur more frequently in women with a history of menstrual disorders; premenstrual-like syndrome; changes in libido; changes in appetite; cystitis-like syndrome; headache; intolerance to contact lenses; nervousness; dizziness; fatigue; backache; hirsutism; loss of scalp hair; erythema multiforme; erythema nodosum; hemorrhagic eruptions; itching; vaginitis.

The following laboratory results may be altered by the use of oral contraceptives: hepatic function—increased sulfobromophthalein retention and other tests; coagulation tests—increase in prothrombin, Factors VII, VIII, IX and X, decrease in anti-thrombin III, increase in platelet aggregability; thyroid function—increase in PBI, and butanol-extractable protein-bound iodine and decrease in T^3 uptake values; metyrapone test; pregnanediol determination.

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Ortho Pharmaceutical Corporation
Raritan, New Jersey 08869

Ortho



Butazolidin® alka

Each capsule contains:
100 mg phenylbutazone USP
100 mg dried aluminum hydroxide gel USP
150 mg magnesium trisilicate USP

If it doesn't work in a week, forget it.

Ragan C. The Clinical Picture of Rheumatoid Arthritis. In Arthritis, ed 8, edited by J. L. Hollander and D. J. McCarty, Jr. Philadelphia Lea & Febiger, 1972, chap. 21, p. 335.

Geigy

Fire fighter for arthritic flare-ups.

Important Note: This drug is not a simple analgesic. Do not administer casually. Carefully evaluate patients before starting treatment and keep them under close supervision. Obtain a detailed history, and complete physical and laboratory examination (complete hemogram, urinalysis, etc.) before prescribing and at frequent intervals thereafter. Carefully select patients, avoiding those responsive to routine measures, contraindicated patients or those who cannot be observed frequently. Warn patients not to exceed recommended dosage. Short-term relief of severe symptoms with the smallest possible dosage is the goal of therapy. Dosage should be taken with meals or a full glass of milk. Substitute alka capsules for tablets if dyspeptic symptoms occur. Patients should discontinue the drug and report immediately any sign of: fever, sore throat, oral lesions (symptoms of blood dyscrasia); dyspepsia, epigastric pain, symptoms of anemia, black or tarry stools or other evidence of intestinal ulceration or hemorrhage, skin reactions, significant weight gain or edema. A one-week trial period is adequate. Discontinue in the absence of a favorable response. Restrict treatment periods to one week in patients over sixty.

Indications: Rheumatoid arthritis, osteoarthritis, bursitis, acute gouty arthritis and rheumatoid spondylitis.

Contraindications: Children 14 years or less, senile patients, history or symptoms of G.I. inflammation or ulceration including severe, recurrent or persistent dyspepsia, history or presence of drug allergy, blood dyscrasias, renal, hepatic or cardiac dysfunction, hypertension, thyroid disease, systemic edema, stomatitis and salivary gland enlargement due to the drug, polymyalgia rheumatica and temporal arteritis, patients receiving other potent chemotherapeutic agents, or long-term anticoagulant therapy.

Warnings: Age, weight, dosage, duration of therapy, existance of concomitant diseases, and concurrent potent chemotherapy affect incidence of toxic reactions. Carefully instruct and observe the individual patient, especially the aging (forty years and over) who have increased susceptibility to the toxicity of the drug. Use lowest effective dosage. Weigh initially unpredictable benefits against potential risk of severe, even fatal, reactions. The disease condition itself is unaltered by the drug. Use with caution in first trimester of pregnancy and in nursing mothers. Drug may appear in cord blood and breast milk. Serious, even fatal, blood dyscrasias, including aplastic anemia, may occur suddenly despite regular hemograms, and may become manifest days or weeks after cessation of drug. Any significant change in total white count, relative decrease in granulocytes, appearance of immature forms, or fall in hematocrit should signal immediate cessation of therapy and complete hematologic investigation. Unexplained bleeding involving CNS, adrenals, and G.I. tract has occurred. The drug may potentiate action of insulin, sulfonylurea and sulfonamide-type agents. Carefully observe patients taking these agents. Nontoxic and toxic goiters and myxedema have been reported (the drug reduces iodine uptake by the thyroid). Blurred vision can be a significant toxic symptom worthy of a complete ophthalmological examination. Swelling of ankles or face in patients under sixty may be prevented by reducing dosage. If edema occurs in patients over sixty, discontinue drug.

Precautions: The following should be accomplished at regular intervals. Careful detailed history for disease being treated and detection of earliest signs of adverse reactions; complete physical examination including check of patient's weight; complete weekly (especially for the aging) or an every two week blood check; pertinent laboratory studies. Caution patients about participating in activity requiring alertness and coordination, as driving a car, etc. Cases of leukemia have been reported in patients with a history of short- and long-term therapy. The majority of these patients were over forty. Remember that arthritic-type pains can be the presenting symptom of leukemia.

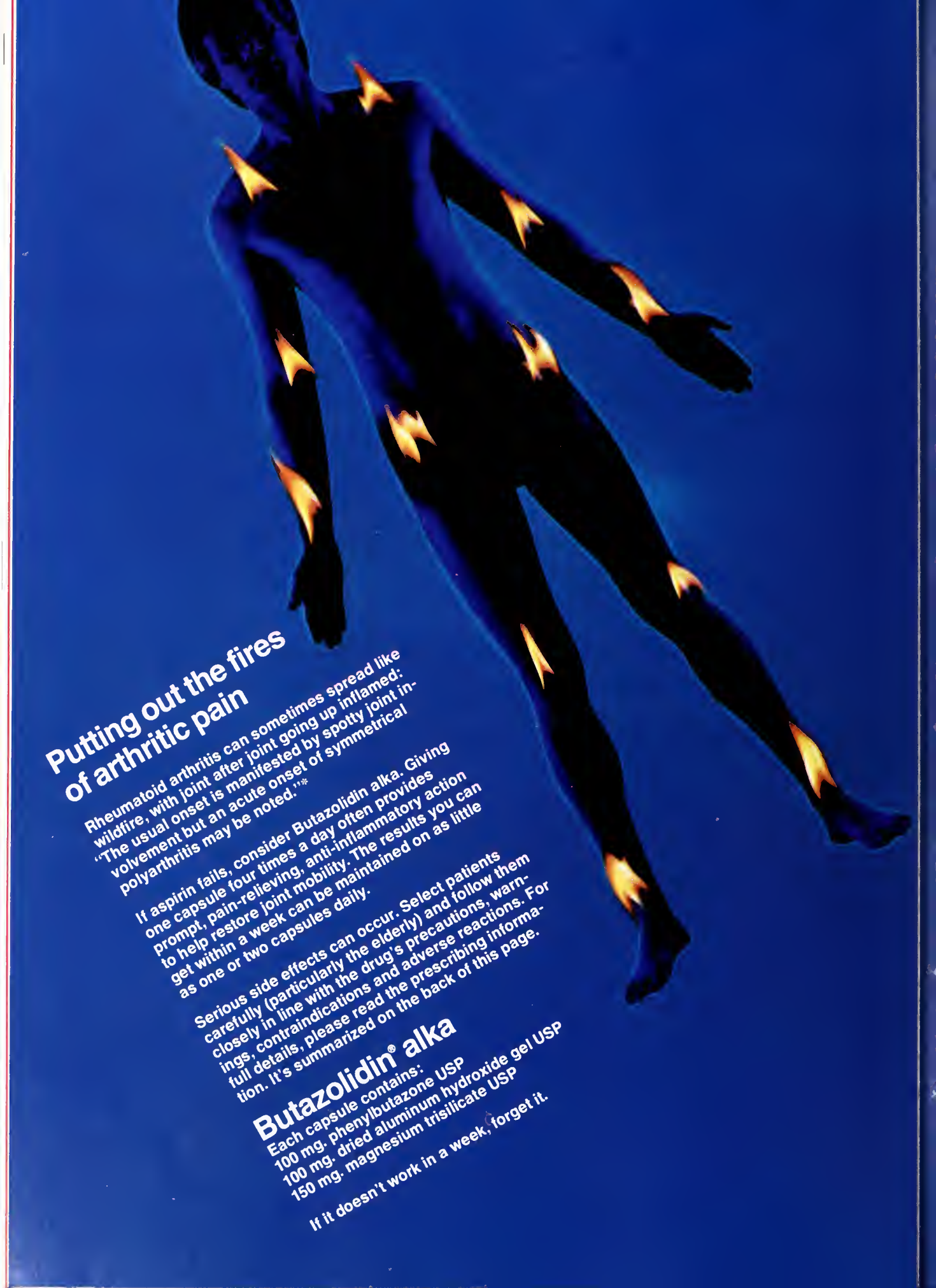
Adverse Reactions: This is a potent drug; its misuse can lead to serious results. Review detailed information before beginning therapy. Ulcerative esophagitis, acute and reactivated gastric and duodenal ulcer with perforation and hemorrhage, ulceration and perforation of large bowel, occult G.I. bleeding with anemia, gastritis, epigastric pain, hematemesis, dyspepsia, nausea, vomiting and diarrhea, abdominal distention, agranulocytosis, aplastic anemia, hemolytic anemia, anemia due to blood loss including occult G.I. bleeding, thrombocytopenia, pancytopenia, leukemia, leukopenia, bone marrow depression, sodium and chloride retention, water retention and edema, plasma dilution, respiratory alkalosis, metabolic acidosis, fatal and nonfatal hepatitis (cholestasis may or may not be prominent), petechiae, purpura without thrombocytopenia, toxic pruritus, erythema nodosum, erythema multiforme, Stevens-Johnson syndrome, Lyell's syndrome (toxic necrotizing epidermolysis), exfoliative dermatitis, serum sickness, hypersensitivity angiitis (polyarteritis), anaphylactic shock, urticaria, arthralgia, fever, rashes (all allergic reactions require prompt and permanent withdrawal of the drug), proteinuria, hematuria, oliguria, anuria, renal failure with azotemia, glomerulonephritis, acute tubular necrosis, nephrotic syndrome, bilateral renal cortical necrosis, renal stones, ureteral obstruction with uric acid crystals due to uricosuric action of drug, impaired renal function, cardiac decompensation, hypertension, pericarditis, diffuse interstitial myocarditis with muscle necrosis, perivascular granulomata, aggravation of temporal arteritis in patients with polymyalgia rheumatica, optic neuritis, blurred vision, retinal hemorrhage, toxic amblyopia, retinal detachment, hearing loss, hyperglycemia, thyroid hyperplasia, toxic goiter, association of hyperthyroidism and hypothyroidism (causal relationship not established), agitation, confusional states, lethargy, CNS reactions associated with overdosage including convulsions, euphoria, psychosis, depression, headaches, hallucinations, giddiness, vertigo, coma, hyperventilation, insomnia, ulcerative stomatitis, salivary gland enlargement.

(B)98-146-070-J (10/71)

For complete details, including dosage, please see full prescribing information.

GEIGY Pharmaceuticals
Division of CIBA-GEIGY Corporation
Ardsley, New York 10502

BU 10259



Putting out the fires of arthritic pain

Rheumatoid arthritis can sometimes spread like wildfire, with joint after joint going up inflamed. "The usual onset is manifested by spotty joint involvement but an acute onset of symmetrical polyarthritis may be noted."*

If aspirin fails, consider Butazolidin alka. Giving one capsule four times a day often provides prompt, pain-relieving, anti-inflammatory action to help restore joint mobility. The results you can get within a week can be maintained on as little as one or two capsules daily.

Serious side effects can occur. Select patients carefully (particularly the elderly) and follow them closely in line with the drug's precautions, warnings, contraindications and adverse reactions. For full details, please read the prescribing information. It's summarized on the back of this page.

Butazolidin® alka

Each capsule contains:
100 mg. phenylbutazone USP
100 mg. dried aluminum hydroxide gel USP
150 mg. magnesium trisilicate USP

If it doesn't work in a week, forget it.

DEAN'S REPORT:

Quality of Medical Education and Quality Health Care



James A. Pittman, Jr., M.D.
Executive Dean
University of Alabama School of Medicine
Birmingham-Tuscaloosa-Huntsville

One of the college presidents in Alabama recently celebrated his tenth year as president, and he was asked what he had accomplished in those ten years. "I've survived," he answered. Perhaps that should be a sufficient answer for any administrator in an educational institution these days, particularly a medical school dean. One southern medical school has allegedly run through 13 deans in the past 8 years, and a number of schools have had no dean among the last few who lasted more than 2 years.

Yet, somehow it is not satisfying simply to feel that one has only "survived." Thus, I've listed below changes which have occurred during the past 27 months during which I've been Dean at the University of Alabama School of Medicine.

1. **4 year curriculum.** The school has returned to a basic 4-year curriculum, having experimented with a 3-year curriculum for several years. The reasons for this are discussed more extensively elsewhere[1].

2. **More demanding curriculum.** For several years, there have been no regular Saturday (or Sunday) classes and students often were able to take off one additional day during the week, giving them a "4-day work week." Simultaneously, there have been very low scores on national boards with high failure rates. Yet the students complained of being rushed and confused by the haste of the 3-year continuous "race course to the M.D. degree." Under the assumption that only those curricula which ask shall receive, we have attempted to make the medical studies more demanding and rigorous without being harrassing to the students.

3. **National Board of Medical Examiners tests.** Students are now being required to take and pass these tests. The main rationale here is that they will sooner or later have to take some test composed of NBME questions for licensure (e.g., Flex, or a state board exam, almost all of which are now derived from NBME material), and the best time for success is right after taking the formal courses. Their passing the tests is for both academic assessment of the student and to assure delivery of a graduate to society who will be licensable to practice medicine.

4. **Grades.** Explicit grades (A, B, C, etc.) have been reintroduced, to replace the former "Pass-Fail" system.

5. **Restoration of discipline courses.** Three years ago, the school had no course in anatomy, biochemistry, physiology, microbiology, pharmacology, or pathology. All basic science teaching was organ oriented (i.e., gastroenterology, cardiology, nephrology, pulmonary, etc.). Again, the detailed reasons are given elsewhere[1].

6. **Biology emphasis.** In the current rush to redress past deficiencies in teaching of social and behavioral studies, there is a tendency for these to displace rather than supplement traditional biological studies, and this at a time when information and potential in the latter fields are expanding enormously. Current changes in the medical school curriculum are aimed at making certain the physician remains the most expert member of society in human biology.

7. **Pathology central.** Many other members of "the health care team" are spending large amounts of time, effort, and money studying specific organs (e.g., the eye for optometrists) or disciplines (e.g., pharmacology for pharmacists). One study recently claimed that pharmacy students in the U.S. now receive *twice* as many curriculum hours in *pharmaeology* (not pharmacy) as do medical students, thus leading to the claim that they are the most expert at drug therapy and should "take over this aspect of management."

8. **Social and behavioral studies.** These have been neglected in the past and must be added on to the above, with emphasis on social and behavioral causes of disease or maintenance of health as well as on the generalist functions emphasized by the reform movement generated by family practice[2].

9. **Support of dispersed clinical campuses.** The medical school has supported first programs of medical education in Montgomery and more recently in Tuscaloosa and Huntsville, with the aid of state funding in the latter two, which are integral components of the School of Medicine.

10. **Maintenance of functional integrity of "the health care team."** We have abolished the PA (physician's assistant) program at the School of Medicine. *Differentiation* of roles rather than production of "junior doctors" is being emphasized.

11. **Leadership role for physician.** The "physician as captain of the team" is the concept and phrase most repulsive to some health care workers and perhaps a large part of the general public, who view the physician as obsolete and untrustworthy[3], an archaic money-grubber with little role in the future[3]. The above 10 points come together in the eleventh: Continuously strive to assure that the M.D. is sufficiently mature, educated, professionally maintained, differentiated, distinctive, and responsible to be the unmistakable leader of the health care team — one the others will *want* to be the leader.

The University of Alabama School of Medicine will do its utmost to fit its graduates to be tomorrow's leaders in health care. It is up to the practicing profession to do the rest.

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3. Francke, D. E., and Whitney, H.A.K., Jr.: Perspectives in Clinical Pharmacy Hamilton, Illinois; Drug Intelligence Publications, 1972, p. 7.

ALABAMA DEPARTMENT OF PUBLIC HEALTH:

Bureau of Preventable Diseases

ST. LOUIS ENCEPHALITIS

Following the aerial spraying of Birmingham and the resultant death of adult mosquitoes, the reporting of suspect and confirmed cases of this disease declined precipitously. The to-be-expected fall temperatures have reduced the activity of adult culicines and the egg-laying activity of the females. This, then, is the final report on this disease for the 1975 biting season. We will continue to monitor the laboratory studies of the 24 presumptive and 166 remaining suspected cases. There were 29 confirmed cases.

NEONATAL TETANUS

This is a rare disease in the United States and in Alabama. Prevention of this disease to achieve zero incidence in the newborn is attainable. Fully immunized pregnant mothers contribute to complete protection to infants during the crucial neonatal period. Proper peri-natal and post-natal care will aid in the prevention of the disease. For the neonate, early diagnosis and intensive therapy with human tetanus immune globulin, antibiotics and control of muscle spasm usually result in a high cure rate.

TUBERCULOSIS

This disease maintains its high incidence in Alabama. Through October 31, 1975, 689 cases of active tuberculous disease have been reported to the State Health Department. The State Tuberculosis Control personnel are especially appreciative of the cooperation physicians in all sections of the State extend to them. Through this cooperative effort active disease is being aggressively treated and families are provided prophylaxis. The Tuberculosis Congrol Program offers to all physicians for their patients effective antimycrobial medication without charge.

IMMUNIZATION

Survey reports on the immunization levels of school-entering children and children aged 2-5 are now being received by the Bureau of Preventable Diseases. Early reports give the impression that the ongoing immunization program is improving the protection provided Alabama youngsters.

A recurring question concerns the use of rubella vaccine for the children of pregnant mothers. On this subject the following conclusion is quoted from Krugman & Ward*: "...rubella vaccine may be given to children whose mothers are pregnant." The immunization of these children to decrease the risk of spread of natural infection seems reasonable.

*Krugman, S., Ward, R: Infectious Diseases of Children and Adults. 5th Ed., C.V. Mosby Co., St. Louis, 1973, p. 247.

RABIES

Post exposure rabies treatment is expensive and poten tially life threatening, but most importantly it is prevent ble. Prompt community action is necessary to curb th number of dog and cat bites by removal of all anima running at large. Strict enforcement of rabies vaccinatio requirements for dogs and cats will reduce the incidence c rabies and the need for post exposure rabies treatment.

MENINGOCOCCUS MENINGITIS

There is now an approved vaccine available as a immunizing agent against both Meningococcus Type "A and "C". Available data confirm the usefulness of thes vaccines in epidemic situations. A good antibody respons is present 14 days after immunization. There is littl available data on the effectiveness of these vaccines i children. Culture of the organism and confirmatory typin is essential to the use of these vaccines.

DARKFIELD MICROSCOPY
is available to physicians at no cost
by calling 832-3205 collect at any time.
A technician and equipment will be
dispatched to your office.

Adolescent Care Unit

350 Crossgates Blvd.
P. O. Box 730
Brandon, Mississippi 39042
(601) 982-8151

A private, in-patient intensive psychiatric treatment unit for a wide range of nervous, emotional, mental and personality disorders. Accredited and Licensed. Academic programs maintained by Educational Psychologist. The Adolescent Care Unit is situated in a General hospital less than two miles from the Jackson Municipal Airport.

C. Mims Edwards, M.D.,
Attending Physician

Barbara Goff, M.D.,
Consulting Physician

Digest of Actions of the State Committee of Public Health

The State Committee of Public Health at its meeting on October 15, 1975 took the following actions:

Held joint meeting with Licensure Advisory Board and lopted Rules, Regulations and Standards for Independent inical Laboratories, effective November 14, 1975.

Considered request from the City of Hueytown for :emption from paying fees required by Act 1590. Request as considered, along with the Attorney General's opinion ting no exemption from payment of fees. The Committee ıthorized enforcement proceedings for compliance.

Approved Long Term Care Revision of the Alabama aster Hospital Plan, pursuant to Code of Alabama, Title 2, Par. 204 (5). Submitted this to DHEW for update of the ill-Burton Plan.

Adopted guidelines for acquiring computerized tomo-raphy units to replace the interim guidelines previously tilized.

Noted Federal inaction to change the indefinite validity f Section 1122, Certificates of Need after an enforceable bligation has been incurred. Recommended reintroduction t the next session of the Legislature of a moratorium bill ased on bed capacity.

Approved regulations governing preparation, picking, acking and handling of crab meat, effective October 15, 975.

Accepted CHP Phase II Physician Manpower Study as one f several reference tools and used by the Legislature in naking appropriations for medical schools.

Received information regarding the passage of House Bill 433 designating the State Board of Health as the State Health Planning and Development Agency.

- Recommended no change in the status of control for Talwin^{R} tablets, which remain in Schedule IV.
- Adopted recommendation of Medical Radiation Advisory Committee that:

a. An individual who has had no clinical practice of routine uses of radionuclides for diagnosis and/or treatment within the past 3-5 years should be requested to show evidence of 40 hours of cme in clinical nuclear medicine, and

b. An application from an individual who has had no clinical nuclear medicine experience in the past 5 years or longer should be requested to show evidence of current cme of a minimum of 120 hours of educational experience within an approved nuclear medicine department having a full-time practioner.

- Noted the passage of Health Department supported legislation, redefining vital registration districts by county lines, reporting TB cases by laboratories, designating the State Board of Health as the State Health Planning and Development Agency and amending the Good Samaritan Act to include Dentists and EMT's.
- Approved recommendation for termination of the Hospital Service for the Indigent Program and for shift of these limited funds to other areas, including County Health Services, Cancer Treatment and others.
- Approved three Medicaid Plan Amendments involving cost sharing, alteration of blindness definition to conform with Federal regulations and approval of the establishment of a dispensing fee for Medicaid drug providers. ■

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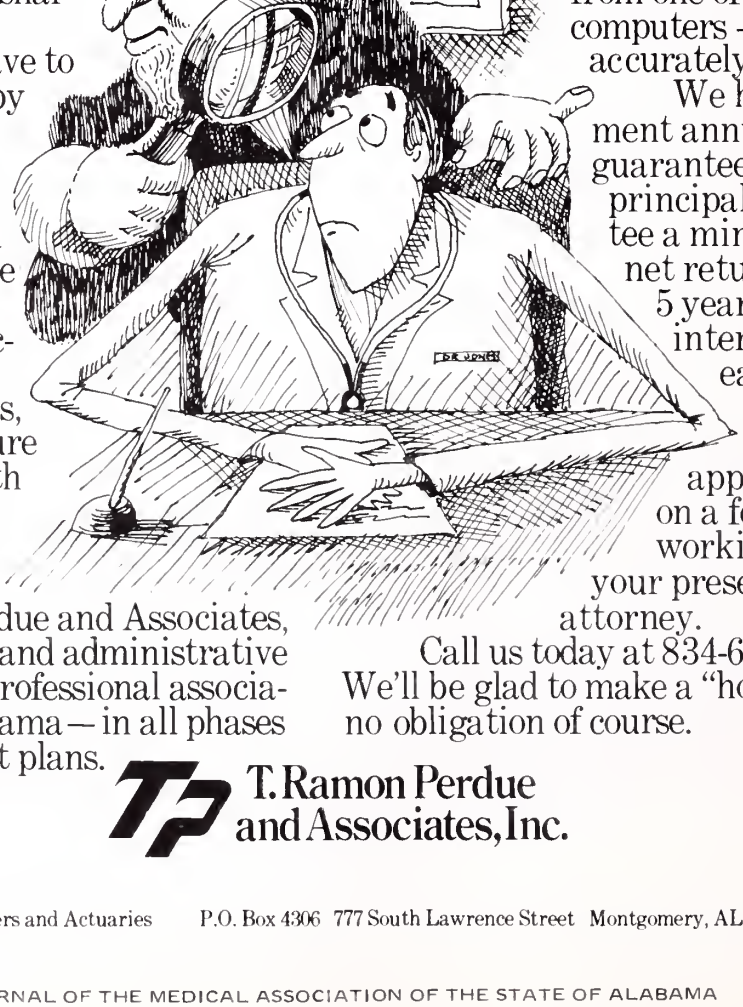
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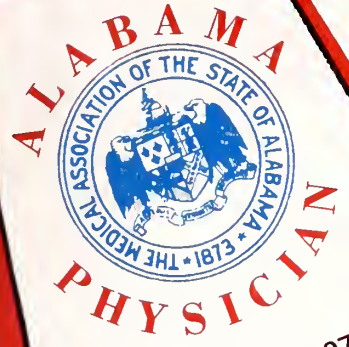
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IN THIS ISSUE

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Thyroglossal Duct Remnants
MIST—Observations And Trends

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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

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with associated
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Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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The JOURNAL

of the

Medical Association of the State of Alabama

VOLUME 45, NUMBER 6 DECEMBER 1975

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price $12.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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Complete literature available on request from Professional Services Dept. PML.



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Way back in 1968 when MASA hired its first young attorney to serve in the dual capacity of Legal-Legislative Counsel, there were high hopes that this office would some day develop into a fountain head of medico-legal knowledge to serve the physicians of Alabama. It took 7 years and a sucession of attorneys ranging from the first one (Reggie Hamner, now Secretary of the State Bar Association) through Jerry Wood (now Assistant U. S. Attorney), to our present attorney (Jack Mooresmith, who bears the most auspicious title of General Counsel and has been unburdened of primary responsibility for legislative matters) to bringing us to the threshold of our ultimate goal.

Each passing day brings to the desk of our General Counsel some knotty problem dealing with legal matters affecting the practice of medicine. Some of these inquiries require a quick curbstone opinion because they are so similar to questions which have previously been asked and determined; others send the General Counsel to the law's reference books and require varied times of research.

Sometimes a widow will call to inquire how long she must retain her physician-husband's records, or how she can legally release them to another physician. Sometimes it is a member's own private attorney who is seeking information on a new piece of legislation, or perhaps the latest court interpretation of an old law.

Just within the past year a new Medical Practice Act, a law to mandate insurance coverage for newborn children, laws relating to drug prescribing and licensure, laws concerning medical liability with a host of sections relating directly to the practice of medicine have been enacted in Alabama.

More numerous have been instances of questions from both attorneys and physicians across the State regarding disposition of physicians' records at death or retirement, the legal aspects of corporations and professional associations, the questions of debtor relief pursuant to the State's Bankruptcy Act and a whole host of questions relating to the ethics of medical practice. The concept of a full-time General Counsel for MASA has now been well-established and the value of services rendered as just one dues benefit grows every day. ■

IMPORTANT INFORMATION: *This is a Schedule V substance by Federal law; diphenoxylate HCl is chemically related to meperidine. In case of overdosage or individual hypersensitivity, reactions similar to those after meperidine or morphine overdosage may occur; treatment is similar to that for meperidine or morphine intoxication (prolonged and careful monitoring). Respiratory depression may recur in spite of an initial response to Nalline® (nalorphine HCl) or Narcan® (naloxone HCl) or may be evidenced as late as 30 hours after ingestion. LOMOTIL IS NOT AN INNOCUOUS DRUG AND DOSAGE RECOMMENDATIONS SHOULD BE STRICTLY ADHERED TO, ESPECIALLY IN CHILDREN. THIS MEDICATION SHOULD BE KEPT OUT OF REACH OF CHILDREN.*

Indications: Lomotil is effective as adjunctive therapy in the management of diarrhea.

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Warnings: Use with special caution in young children, because of variable response, and with extreme caution in patients with cirrhosis and other advanced hepatic disease or abnormal liver function tests, because of possible hepatic coma. Diphenoxylate HCl may potentiate the action of barbiturates, tranquilizers and alcohol. In theory, the concurrent use with monoamine oxidase inhibitors could precipitate hypertensive crisis. In severe dehydration or electrolyte imbalance, withhold Lomotil until corrective therapy has been initiated.

Usage in pregnancy: Weigh the potential benefits against possible risks before using during pregnancy, lactation or in women of childbearing age. Diphenoxylate HCl and atropine are secreted in the breast milk of nursing mothers.

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Adverse reactions: Atropine effects include dryness of skin and mucous membranes, flushing, hyperthermia, tachycardia and urinary retention. Other side effects with Lomotil include nausea, sedation, vomiting, swelling of the gums, abdominal discomfort, respiratory depression, numbness of the extremities, headache, dizziness, depression, malaise, drowsiness, coma, lethargy, anorexia, restlessness, euphoria, pruritus, angioneurotic edema, giant urticaria, paralytic ileus, and toxic megacolon.

Dosage and administration: ***Lomotil is contraindicated in children less than 2 years old.*** Use only Lomotil liquid for children 2 to 12 years old. For ages 2 to 5 years, 4 ml. (2 mg.) t.i.d.; 5 to 8 years, 4 ml. (2 mg.) q.i.d.; 8 to 12 years, 4 ml. (2 mg.) 5 times daily; adults, two tablets (5 mg.) t.i.d. to two tablets (5 mg.) q.i.d. or two regular teaspoonfuls (10 ml., 5 mg.) q.i.d. Maintenance dosage may be as low as one fourth of the initial dosage. Make downward dosage adjustment as soon as initial symptoms are controlled.

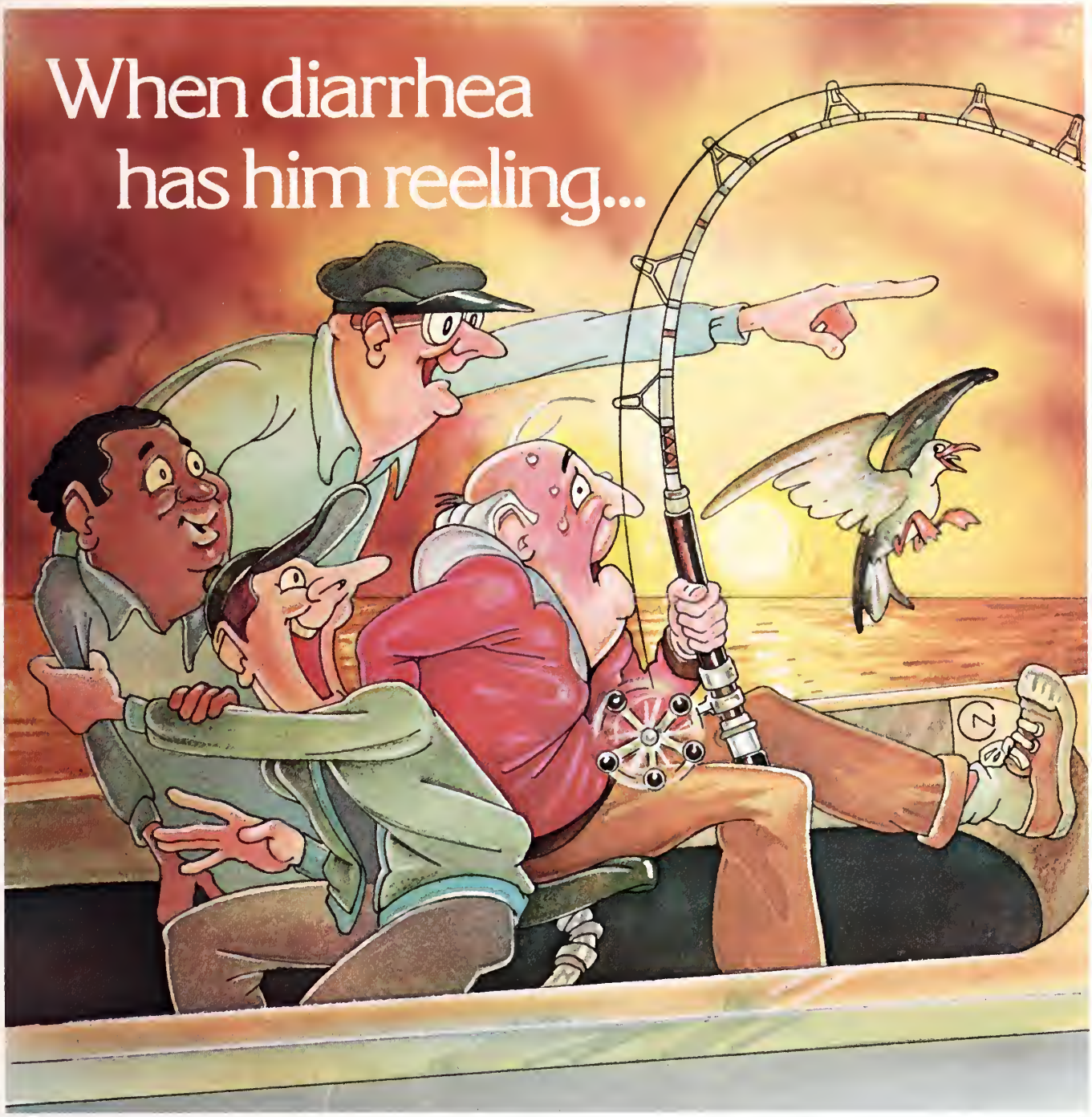
Overdosage: Keep the medication out of the reach of children since accidental overdosage may cause severe, even fatal, respiratory depression. Signs of overdosage include flushing, hyperthermia, tachycardia, lethargy or coma, hypotonic reflexes, nystagmus, pinpoint pupils and respiratory depression which may occur 12 to 30 hours after overdose. Evacuate stomach by lavage, establish a patent airway and, when necessary, assist respiration mechanically. A narcotic antagonist may be used in severe respiratory depression. Observation should extend over at least 48 hours.

Dosage forms: Tablets, 2.5 mg. of diphenoxylate HCl with 0.025 mg. of atropine sulfate. Liquid, 2.5 mg. of diphenoxylate HCl and 0.025 mg. of atropine sulfate per 5 ml. A plastic dropper calibrated in increments of ½ ml. (total capacity, 2 ml.) accompanies each 2-oz. bottle of Lomotil liquid.

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Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration



Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

main purpose of drug information for the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeling must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the inforrnation is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

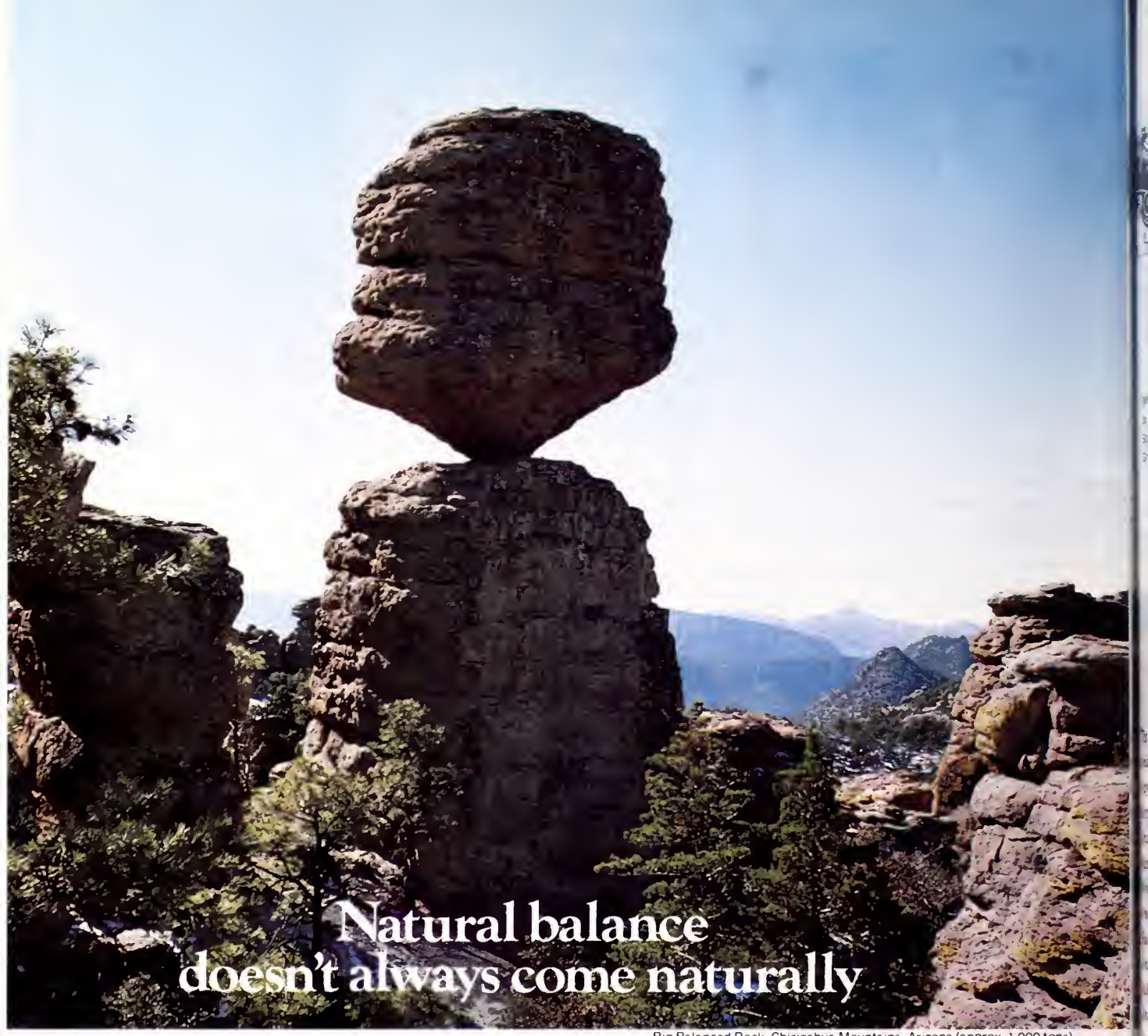
The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

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- Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
- Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
- Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

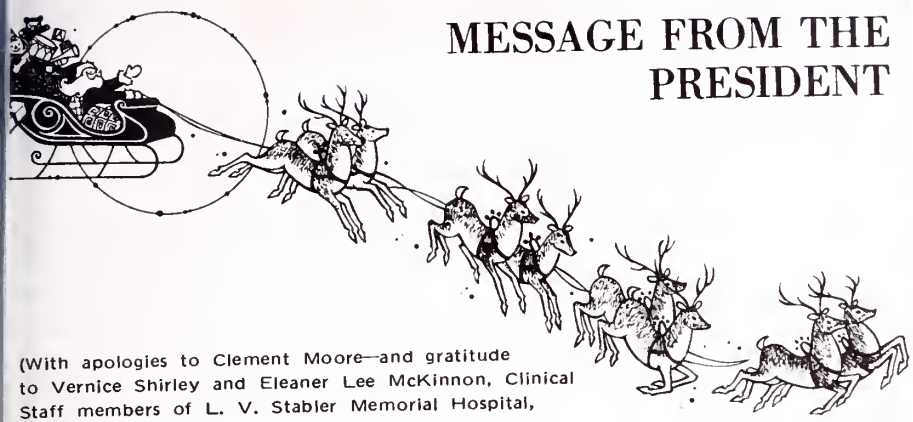
Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*



MESSAGE FROM THE PRESIDENT



E. Vernon Stabler, Sr., M.D.

(With apologies to Clement Moore—and gratitude to Vernice Shirley and Eleaner Lee McKinnon, Clinical Staff members of L. V. Stabler Memorial Hospital, Greenville, Alabama.)

The Hindsight Before Christmas...

'Tis the month of December—Christmas is near
And my mind wanders over the soon-ending year.
Way back in April there arose such a clatter
Reporters rushed to the scene to see what was the matter!
And as a result of pseudo-detective work—
Was Dickey a lobbyist, or was he a clerk?
More rapid than eagles—House Bills they came
And by "hanging in there," MASA played a good game.
Hues and cries of State lawyers—oh my, how they rant!
And we even inspired a cartoon by Spang.
Substitute though it is, and not without flaw,
An acceptable Liability Act is now Alabama Law.
Now, hopes are pinned high on CME successes
And on Galbraith to correct PSRO's second guesses.
Doctors back from Hawaii are snug in their beds
While visions of hula girls still dance in their heads
And, also, the assurance of returns on investment
Soothes the pain of AMA's Atlantic City assessment.
The MASA-Wausau alliance called "the best in the Nation"
Has helped us control our insurance situation;
(Though we're now in the midst of the pressing assignment
Of finding, through options, equally attractive alignment)
With an established Grievance Committee to boot,
Santa shouldn't come dressed in a malpractice suit!
Instead, may he bring us better working relations
With State Lawyer and Hospital Associations.
At the top of our list—from the depths of our souls,
Please, Santa, don't bring more government controls.
Away with the plague of such intervention
So we can give Health Care our major attention!
The new Constitution improved matter internal;
Our own printing presses bring an updated Journal.
Also, use of our presses by members makes sense
In more timely delivery at far less expense.
Effective instruction at our Hypertension Clinics
Is winning the praise of even the cynics.
Much working and planning already afoot
In six Health Service Areas shows physician input.
For a success-filled meeting in April we pray
(Then good-bye to Yours Truly with the coming of May!)
In looking it over, things have gone rather well;
We've won some—we've lost some (among these our Nell)
And some of the losses were not MASA's—just mine—
Among these, that hoped-for trip to the Rhine.
But, if Santa delivers all that we ask,
We'll be ready and willing and set for the task.
Now, Patterson! Now, Mooresmith! Now, Wyatt and Walker!
On, Whitaker! On, Stallings! On Dixon (our talker)!
Let's all join together in this message of cheer—
MERRY CHRISTMAS! GOOD HEALTH! and
A HAPPY NEW YEAR!

E. Vernon Stabler

ALASKAN ADVENTURE

As announced in a previous issue of the *Journal,* MASA's summer trip for 1976 will be a fabulou Alaskan Adventure. The Alaskan Adventure will depart via chartered United Air Lines DC-8 jet o June 17, 1976 and fly directly to Vancouver, British Columbia.

One of the best features of this cruise is that when you board the Island Princess in Vancouver yo will only unpack once for the full nine-day cruise. The Island Princess has every convenience an comfort available. It is a 20,000-ton elegant cruiser with 550 feet of spacious decks, lounges, danc floors, heated swimming pool, theatre, etc. The list could go on and on. Also, there is a generou 70-pound baggage allowance.

The Alaskan Adventure, arranged in conjunction with INTRAV, lists these outstanding ports-of call—Vancouver, Ketchikan, Juneau, Skagway, Glacier Bay and Sitka. A Cruise Director will b available to arrange shipboard activities, shore excursions, shopping and to assist with all the optiona shore excursions in each port.

The Alaskan Adventure is priced from $1198, depending on the stateroom category selected. Thi price includes the round trip jet transportation, the staterooms, plus complete American Breakfasts full course lunch and dinner, afternoon teas and midnight snacks.

Below is a form for you to fill out to reserve your place on this excellent trip. Reservations ar limited, so send in your reservations today with a deposit of $100, or contact the MASA Centra Office for more information. ■



The Island Princess





ALASKAN ADVENTURE

PLEASE MAKE MY RESERVATION(S) FOR THE ALASKAN ADVENTURE.
ENCLOSED IS MY DEPOSIT OF $_____. ($100 for each reservation).

NAME _____ No. in Party_____

ADDRESS_____

CITY _____ STATE _____ ZIP_____

TELEPHONE _____

RETURN RESERVATION TO: MASA, 19 SO. JACKSON ST., MONTGOMERY, ALA., 36104.

UEST EDITORIAL

Geographic Distribution Of Our Graduates

William F. Bridgers, M.D.* and
James A. Pittman, Jr., M.D.**

editorials
editorials

Inspection of the 1975 Roster of the Medical Association f the State of Alabama reveals that 30.2 per cent of the ıembers of the Association and 26.7 per cent of the censed nonmembers with Alabama addresses are graduates f the University of Alabama School of Medicine. The ombined total is 29.4 per cent. This means, of course, that bout 70.4 per cent of the licensed physicians residing in ılabama are graduates of medical schools in other states, nd that these physicians elected to practice in Alabama ıstead of in the state where they attended medical school.

Establishing a practice somewhere other than where one ttends medical school is very common; our own graduates re scattered widely across the nation and abroad. Neverheless, Alabama has one of the best retention rates in the ıation: analysis of 999 consecutive graduates of our school the period from 1957-1970) shows that 61 per cent are icensed in Alabama with Alabama addresses, and this rate of retention has varied only slightly over that entire 14 year ɔeriod.

How does all this balance out? In fact, over the years Alabama has gained many more physicians, via in-migration, than it has lost because of some of our own graduates leaving the State. In the past decade, 69.2 per cent of the 2,142 new licencees with Alabama addresses were graduates of medical schools other than our own.

These physicians who elected to settle in Alabama have made a significant contrıtution to the State's health care delivery capabilities, and will undoubtedly continue to do so in the future if they continue to establish practices in the State in the same numbers as in the past. However, the reasons for this net inflow are not understood, and are certainly subject to conditions in the other states as well as to the positive attractant factors in Alabama.

In short, we cannot be certain that this trend will continue. On the other hand, we can be assured that an increasing number of new physicians will practice in the State (if our retention rate of our own graduates remains about the same as it has been for many years), because we are now entering a phase of accelerated growth in the class sizes in the University of Alabama System Medical Education Program and the University of South Alabama College of Medicine. As these graduates enter practice, the State will each year enjoy many more home grown physicians than ever before.

A recent article (James A. Pittman, Jr., "The Dean's Report," *Journal of MASA*, Vol. 45, No. 1, 1975) pointed out that medical graduates in the State will soon total about 300 annually, and another (W. F. Bridgers and S. R. Hill, Jr., "The Need For More Residency Programs," *Journal of MASA*, Vol. 45, No. 9, 1975) noted that there may be 400 new physicians per year, counting our graduates and conservatively estimating that the net in--migration of graduates of other schools will continue.

The more important question is to what extent the increasing physician force will improve the access to care for the citizens in the State. On the assumption that our own graduates will make up an increasingly larger proportion of the new physicians, perhaps it would be instructive to examine specifically the geographic distribution of past graduates. In this way, we may learn something of value as we plan for the future.

First, where did they come from? Over the 14 year period mentioned above, the selection of students was remarkably equitable, with respect to their counties of origin, correcting for population distribution. Let us consider here only the graduates who were residents of Alabama (which comprised 94.6 per cent of all the graduates over this 14 year period) and their counties of origin.

The proportion of the State's population in the 31 smallest counties (those with less than 25,000 in the 1970 census) was about 15.5 per cent, and 13.7 per cent of the graduates listed one of these as their county of origin. In the next group of counties (the 18 with 25-50,000 population) reside about 18.1 per cent of the State's



DR. BRIDGERS



DR. PITTMAN

*Special Assistant to the Vice President
for Health Affairs, University of Alabama in Birmingham.
**Dean, School of Medicine
University of Alabama in Birmingham.

population, and 15.1 per cent of the graduates were from these areas. There are 12 counties with 50-100,000 population, in the aggregate containing 21.9 per cent of the State's total population, and there were 19.9 per cent of the graduates from these counties.

Finally, the six largest counties which contain 44.6 per cent of the population, contributed 51.3 per cent of the new graduate physicians over this 14 year period. These data show that the School of Medicine has been fair in selecting students from across the State, contrary to an occasional criticism that we have over-selected from the urban areas at the expense of the more sparsely populated counties. The data for this 14 year period clearly negates this criticism.

The next question is, where did they go? We've already noted that over a third left the State permanently, or at least do not reside in Alabama in 1975. The majority are in Alabama; however, they have not distributed themselves in proportion to the population.

Consider only those in the State: 5.8 per cent settled in the 31 smallest counties; 12.0 per cent in the counties with 25-50,000 population; 16.6 per cent in the 50-100,000 population group; and 65.6 per cent in the six counties with greater than 100,000 people. A simple comparison of these figures with the distribution of the graduates' home counties, shown above, gives a concise picture of what many perceive to be a maldistribution of the State's physician force.

This comparison is revealing in another way. It shows that the county of origin, especially if it is one of the small, sparsely populated ones, is not a very powerful determinant of where the physician will ultimately practice. In fact, nearly as many physicians from counties other than the smallest chose the smallest for their practice sites as did those from the smallest counties.

We are not saying that the county of origin is of no importance. We believe we have selected students equitably from across the State, and we intend to continue to do so in the future, within the limits of workable academic standards and the availability of applicants. However, we do point out that this technique alone will not assure a resultant equitable distribution of the graduates.

That the county of origin plays some role is a certainty: about a quarter (23.7 per cent) of the Alabama resident students did settle in their home counties. However, 73.7 per cent of these who returned home are in the six largest counties; 11.2 per cent in the next largest county group; 9.8 per cent in the next to the smallest counties; and only 5.4 per cent in the group of smallest counties.

In other words, the likelihood that a physician will return to his home county is very much greater if he is from a heavily populated county than if he is from a county with a low population density.

In the light of these very consistent trends, how might we all help to make more equitable, over time, the distribution of our physicians? Frankly, one important reason for bringing these findings to your attention is to admit that we do not have all the answers, and we seek your suggestions based upon your perspectives gained practice, whether it be a rural setting or a heavily populate urban area.

We should also like it to be clear that we neither believ that the medical school must shoulder the blame nor th we alone must find the solution. The problem will take th best efforts of all of us—the schools of medicine, th practicing physicians, the emerging HSA's, the counties an municipal bodies, and the public at large—the consumers c the health services.

We do know that the reasons for the current trends i physician distribution are multiple (as is the case for an complex social behavior), and therefore we accept as matter of faith that there will be no single simple solutio Our efforts to train more physicians in family medicine an other primary care areas, and to disperse the sites of th training (Huntsville, Tuscaloosa, Montgomery, and othe new residency locations) are useful ones, but probably no *the* single panacea.

Some have suggested a massive public education effor with the goal of shifting some responsibility for a individual's health to that individual. Other solutions, such as improved communication and transportation, have been suggested, presumably implying that putting a physician a every crossroad is not the answer to the access problem With this we certainly agree.

Whatever solutions society tries during the next decad in its attempts to solve its problems with health care, you the practicing physicians, along with your patients, will b the ones living with them most closely. Now may be a good time for you to make your views known. We would appreciate your input. ■

Working Without Fanfare

Children of the State of Alabama will be the recipients of a new program which is now in the formulation stage by Alabama pediatricians. Goal of the fledging program involves the distribution of medical and health care services to indigent children.

Under the direction of Dr. Robert O. Harris, III, Mobile, a Children's Advocacy Committee was created during a recent meeting of the Executive Committee of the Alabama Chapter, American Academy of Pediatrics. Members of this committee will have a tremendous impact in the medical funding for and creation of a Children's Medical Services program for this state.

So many times, efforts such as these, particularly by a specialty group within our state, are overlooked and they often fail to be properly reported, whether it be in medical publications or local press. MASA's Interspecialty Council is an extremely active group with each specialty engaged year-round in projects to benefit their patients and improve the services which they as professionals render.

It is not always desirous to "shout it from the mountain tops", but activities similar to this recent endeavor by the pediatricians should not go unnoticed. ■

Rights In Conflict

No doubt by now, most of America's citizenry have learned that in 1974 over 200 of their physicians nationwide received more than $100,000 from Medicaid – a few even accounting for upwards of $200,000!

The news media had quite a field day once HEW had released the information. In many instances, the press within particular states made quite to do over their own physicians who had been recipients, perhaps an attempt to "cage the lion in his den" and bare him naked before onlookers.

Amid the bustle and clamor for headlines, the press in general failed to take notice of another equally important issue which arose from these revelations. It involved the collision of two of our most cherished Constitutional privileges – the right of privacy vs. the public's right to know.

This dilemma was pointed up when officials of the Federal Medicaid program decided that the new Freedom of Information Act required them to release *upon request* the names of those physicians. The names had originally been requested by the **New York Daily News** under the auspices of the Act.

Besides the concern that such disclosure might discourage some physicians from treating future Medicaid patients, the question still arises as to how much of a physician's practice should be open to public scrutiny. Many states, including Alabama, have been working diligently to pass legislation which would protect and strengthen the confidentiality of the patient-physician relationship. While attention has been focused on protecting the front door, the back door has been entered and the inner workings of the practice invaded.

Where is the line to be drawn? Do not such disclosures cast a pale upon the credibility of the physician and that of his practice as viewed through the public eye? And what can the physician do to repair any such inherent damages?

The crucial point to be made here is that physicians are vitally interested in Federal programs that affect their practices and even more importantly, how their patients are affected, favorably or unfavorably, as beneficiaries of these programs. Is there any wonder that their ire is raised when they believe that their practice is being impinged upon by the government, unjustifiably so?

One can only imagine the extent of disclosure and effects thereof that would come as a consequence of a national health insurance package. ■

You Only Go 'Round Once

Stephen Grellet was a French-born Quaker who died in New Jersey in 1855. Grellet would be unknown to the world today except for a few lines which made him immortal. The familiar lines, which have served as an inspiration to so many people, are these:

"I shall pass through this world but once. Any good that I can do, or any kindness that I can show any human being, let me do it now and not defer it. For I shall not pass this way again." ■



Why Santa Could Not Fly...

(The following is a reprint from a report by Congressman Bill Dickinson which seems appropriate for our current times.)

A "usually reliable, highly placed government source" told me an interesting story the other day which I would like to share with you. My inside source said that even though it's only spring, rumors are already flying around Washington that Santa Claus may not be making his annual run this year, and if he does, he may wind up in the clink. It seems that for years the jolly old man has been "breaking every regulation in the books" and now the long arms of the federal government are about to put the squeeze on Santa. Here is the inside scoop on Santa's long list of infractions:

Operating a flying sleigh in absence of certification by the Civil Aeronautics Act of 1938–Unlawfully competing with the U. S. Postal Service on air mail deliveries–Violating Environmental Protection Agency requirements for emissions control devices on his reindeer–Violating the Fair Labor Standards Act by failing to pay his elves the minimum wage or proper overtime benefits–

Breaking the Sherman Anti-Trust Act by maintaining a strict monopoly in his profession–Engaging in unfair promotional advertising, designed to prey on the defenseless minds of children, a violation of the Federal Trade Commission regulations–Failing to secure an Interstate Commerce Commission permit and an assignment of certified routes by the Commerce Commission– Violating numerous Occupational Safety and Health Administration (OSHA) regulations by operating an "unsafe workplace"–

Passing out candy canes not approved by the Food and Drug Administration–Ignoring the edicts of the Equal Employment Opportunity Commission and the Civil Rights Act of 1964 by failing to institute a quota system in his workshop based on race, religion, sex and size (too many elves)–Making toys which were not approved by the Consumer Product Safety Commission–Failing to declare as taxable income the milk and cookies put out for him, and failing to pay gift taxes. Avoiding state and federal taxes on his sleigh, not to mention licensing, registration and having an operator's permit–

AND making various infractions of the National Labor Relations Board regulations, including the maintenance of a non-union shop and unfairly competing with the chimney sweep's union.

My source said these are but a sampling of Santa's more serious Federal offenses, which will almost certainly put the man in red out of business. I was told St. Nick is frantically searching for a lawyer, but that no one is willing to come to his defense.

Meanwhile, there is another Santa Claus in this country which is also in trouble. It is the American free enterprise system and it serves us year 'round. I wonder, will anyone come to its defense? ■

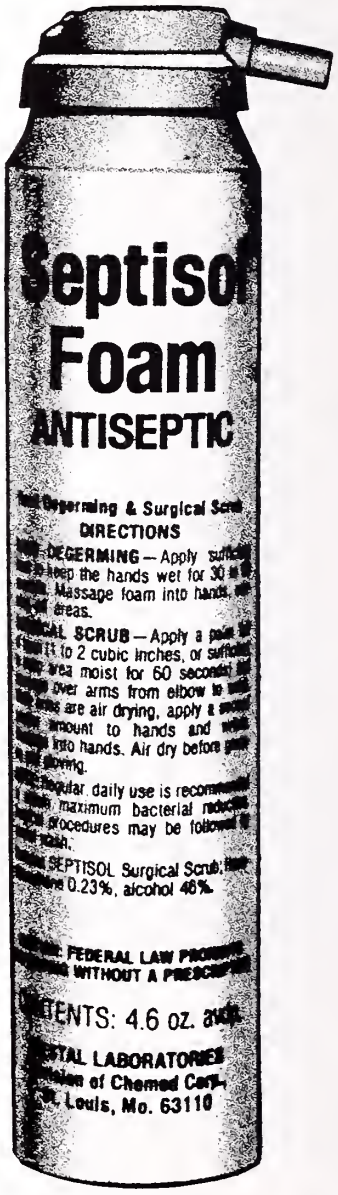
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Letters to the Editor

Scientific Contributor Responds

Thank you for your correspondence on behalf of the *Journal of the Medical Association of the State of Alabama.*

As you know, our department had the opportunity to inform the medical public of the State of Alabama about our work with Subarachnoid Cold Saline Therapy for Intractable Pain, which you were kind enough to publish in your April, 1975 issue.

At present, we are in the process of preparing a manuscript dealing with a new long-acting, potent local anesthetic with minimal tissue toxicity called Duranest with which we have gained experience in epidural anesthesia. As soon as we complete our studies, we will submit the manuscript and hope that you will be able to publish this material soon.

Guenter Corssen, M.D.
Professor and Chairman
Department of Anesthesiology
UAB School of Medicine

Appeal To Physicians And Hospitals

Please find enclosed a feature from the *Dallas Morning News,* written by Helen Callaway, one of the paper's medical writers. I thought it to be an excellent article and one which you may wish to publish in the *Journal* for others to read.

Wallie R. Carpenter
Executive Director
Jefferson Co. Medical Society

Dear doctors and hospitals:

You've been getting big headlines lately beeause a lot of people are suing you for malpractiee.

I have a hunch most of you would never be sued if you treated me compassionately.

Who am I?

I have many faees, many shapes, and a thousand different reasons for being your reluctant patient.

I am the frightened middle-aged woman in the doctor's waiting room, thumbing through a magazine without seeing it and praying that the lump in my breast is not cancer.

I am the nervous youth at the admitting desk; the old man moving down the hall in the uncertain shuffle of the stroke victim; the huge young woman about to give birth for the first time.

In the hospital, I am a bundle of fears. I try not to show it, but I am terrified of the unknown, of pain, of mutilation, of death. A miasma of financial worry surrounds me.

Dear hospital nurses, orderlies, aides and volunteers, please be warm and friendly to me, not impatient and cold. Treat me as an intelligent person, not just a thyroidectomy.

In spite of all your hospital computer and cobalt machines and monitoring marvels, one harsh word from your floor nurse demolishes me.

And doctor- I know my body, like my car, is wearing out as the years go by. But please don't tell a 40-year-old woman she has senile cystitis, or a 45-year-old man he has a senile spine.

We laymen think of senility as the last stages of extreme old age...

Most of all, doctors and nurses aides, hospital aides, please listen to me. My need to lay all my worries and my questions before you is deep and universal.

Some of you doctors and hospital people don't need this advice. You always treat me kindly, you listen, you reassure, you help to ealm my storm of fears.

You treat me like a human being, and I wouldn't sue you even if you scw up a scalpel in my stomach.

Attentive Reader Offers Correction

In the November, 1975 *Journal,* Letters to the Editor, page 15, Dr. F. Douglas Scutchfield, Associate Dean of the College of Community Health Sciences in Tuscaloosa, wrote a comment on the August Editorial by Drs. William F. Bridgers and S. Richardson Hill. While reviewing this article prepared by Dr. Scutchfield, an error was discovered which should be corrected.

Paragraph 8 as printed reads: "In addition, efforts must be expended so that the current 540 house officers are not required to receive a portion of their training in rural communities." This statement is incorrect as officers are required to...The word "NOT" should be deleted.

(Mrs.) Shirley Culp
Executive Secretary
College of Community Health Sciences
Tuscaloosa

Workmen's Compensation Law

I read with interest your coverage of the workmen's compensation law recently passed by the Alabama Legislature. (*Alabama MD*, Vol. 11, No. 50, Dec. 4, 1975).

This bill perhaps is good for doctors, but I am not so sure that it is good for the country as a whole. This country (and any other country) has limited numbers of dollars to spend for any reason. It has been my experience that a great number of workmen's compensation claims are overstated and the patients lay out of work for periods much longer than they normally would if such coverage were not available.

By increasing the amount paid and the benefits derived therefrom, one is going to see more and more patients staying out of work longer with on-the-job injuries. The net effect is going to be the hastening of the demise of the free enterprise system and democracy as we know it.

William B. Hanson, M.D.
Dothan

AMA

representing the profession:

The AMA is primarily a scientific organization. More than 54 per cent of the AMA's budget is spent to improve the delivery of medical and health care; 12 per cent to improve the quality of American medicine; and 11 per cent to improve the public's health knowledge and practices. But these are mere percentages. In fact, every dollar the AMA spends is aimed at helping the physician practice first-rate medicine. During the past year some 1,000 bills relating to medical and health care were introduced in Congress. It is the objective of the AMA to see that this legislative action furthers, rather than restricts, the quality of medical care and the ability of physicians to do their best work. Decisions made by the House of Delegates at the 1975 Annual Convention assure that these activities will continue. By voting to increase the dues—to $250 for regular members and to $35 for intern and resident members—the House provided the means for continued national representation of the profession. The response of the membership to the $60 special assessment voted at the 1974 Clinical Convention indicates clearly that physicians want a strong, active AMA and are ready to support it.

FACT SHEET ON THE AMA

Q: Why did the AMA increase its dues?
A: The AMA was caught in an economic squeeze – the same kind of squeeze that nearly every individual, business, and organization has been faced with in recent years. Costs have risen. The AMA revenues have become inadequate to meet operating expenses. *The Association has operated at a deficit four of the past five years and reserves are insufficient to cover additional deficits.*

Q: How long has it been since the last dues increase?
A: *AMA dues have not increased since 1971,* but operating costs have soared.

Q: Was the membership alerted to the possibility of a dues increase?
A: Yes. In November, 1974, members of the AMA's House of Delegates, state medical associations, and medical speciality societies were notified of the existence of a "critical financial situation" and subsequently received additional background information on the proposed dues increase.

The general membership was informed by articles in *AM News* and the *AMA Newsletter.*

During the 1974 Clinical Convention the House of Delegates created a Special Committee of the House to review the priorities and financial capabilities of the organization with a report requested during the 1975 Annual Convention.

Q: What caused the financial problems identified in late 1974?
A: The financial problems were primarily due to: 1. Inadequate dues structure to support activities; 2. Marked reduction in cash reserves due to cumulative effects of deficit spending;

3. Overprojection of anticipated advertising revenues compared to income; and 4. Acute cash flow deficiency in October and November of 1974.

Q: What has the AMA done to cut cost?
A: *Staff has been cut back by over 200 employees and publications costs have been reduced by 20%.* "A zero based" budget has been implemented which requires periodic rejustification of expenditures for every AMA activity.

Despite imposition of stringent financial contraints, expenditures continue to exceed income from all sources exclusive of income from the assessment instituted in 1975.

Q: How has the AMA used the money received from the special assessment?
A: The money generated from the assessment was used to repay short term bank loans of $3.0 million, for reserves for the projected $2.6 million 1975 deficit, and to reduce accounts payable by $1.3 million.

Q: What will the dues increase mean to the AMA?
A: The dues increase will currently assure a fiscally stable organization capable of aggressive action.

The dues increase will enable the AMA to: 1. Continue activities at the present dollar level; 2. Reexamine priorities

...IES STRUCTURE FOR 1976

and, depending on such review, restore some programs and initiate new ones to the extent of $2 million per year for the next few years; and 3. Achieve a reserve fund of liquid assets equal to the 60% of annual operating expenses within two years. The establishment of a fund adequate to cover unforeseeable operating expenses and abnormal contingencies is a sound business practice.

Q: Why is the AMA considering new activities when they should be discontinuing programs in order to cut costs.

A: Both the House of Delegates and the membership at large have indicated that they do not want the AMA to become a static organization. The vote in the House to increase the dues showed that members of the House of Delegates want a strong, vigorous, financially healthy AMA. Therefore, the Board has included in its projections an additional $1 million per year for newly budgeted programs.

Q: How much of the AMA's budget goes to support the AMA's lobbying effort?

A: The AMA is primarily a scientific organization. Despite the public media's attention to legislative activities, over 54% of AMA's budget is spent to improve the delivery of medical and health care; 12% to improve the quality of American medicine; 11% to improve the public's health knowledge and practices. Only about one-half of 1% is allocated to the Department of Congressional Relations (AMA lobbyists). ■

Screening Programs Urged To Detect Thyroid Problems

The American Medical Association and the American Hospital Association are conducting a joint campaign to encourage state and local medical societies to begin screening programs for persons who underwent radiation therapy of the neck and face during the 1930s through the 1950s.

Studies have shown that radiation therapy—commonly used until 20 years ago to shrink infected tonsils, adenoids and thymus glands in children—may be followed by a high rate of thyroid cancer and by other abnormalities of the thyroid gland.

A recent letter to all state medical societies, signed by AMA Executive Vice President James H. Sammons, M.D., and AHA President J. A. McMahon, described the best treatment for thyroid cancer—suppressive treatment rather than surgery in most cases—and summarized efforts in some areas to set up the screening programs.

Thyroid cancer is a slow-growing cancer that rarely threatens life, so that conservative treatment is recommended by the AMA and AHA. ■

Decisive As A Surgeon

Decision is a sharp knife that cuts clean and straight; indecision a dull one that hacks and tears and leaves ragged edges behind it. ■



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NEW TESTAMENT PHYSICIAN & AUTHOR:

DOCTOR LUKE



In accredited documented history, the oldest collection of books which now make up the New Testament contains "The Gospel According to St. Luke." Among all early Christian writings, the place of The Gospel of Luke has been secure and practically unchallenged.

It is at this particular time of year that Christians around the world turn their attention to the virgin birth of Jesus (Luke 1-2). Of all the recorded accounts of Christ's birth, none is more vividly portrayed than that of Luke, especially with his attention to medical detail.

Who was this biblical writer, reputed to be a physician by profession? Records from the early Christian Church give straight-forward evidence that Luke was an Antiochian of Syria by birth. He was a disciple of the Apostles and later accompanied Paul on his missionary journeys. Luke was not married and was said to have died at the age of 84.

Religious scholars support the claim that Luke was also the author of Acts, primarily since The Gospel of Luke and Acts are permeated throughout by medical terminology, and that Luke was Paul's physician for the 15 years prior to Paul's death in Rome. The language and terminology found in The Gospel of Luke and Acts are of such a nature that they corroborate in a striking manner the tradition that the author was Luke, "the beloved physician" as Paul preferred to call him.

The circumstance that his profession was that of a physician is not unimportant, for it implies that he must have possessed a certain amount of scientific knowledge and that he belonged to a class of educated men.

There existed in Rome at the time of the Emperors a medical supervision; a superior college *(Collegium archiatrorum)* was charged with the duty of examining in every city those who desired to practice the healing arts. Newly admitted men were placed under the direction of older physicians; their modes of treatment were strictly scrutinized, and their mistakes severely punished, sometimes by taking away their diplomas.

For these reasons, Luke must have possessed an amount of scientific, medical and literary culture above that of most of his associates and friends.

The following may be cited as some examples of medically tinted language and terminology among Luke's writings:

Luke 4:38—Describes the disease of Peter's mother-in-law as a "great fever." (The Gospel of Mark merely describes it as "fever.")

Luke 5:12—Describes the leper as "a man full of leprosy." (Mark and Matthew merely say "a leprous man.")

Luke 8:43—Reports the healing of a woman with blood disease and describes it as an incurable sickness. (Mark notes that she suffered many things under the treatment of many physicians; that in the process, she had spent all the money she had and instead of getting better, she became worse.)

Luke 13:11—Notes a severe arthritic condition of many years' duration; particular attention to symptoms of arthritis.

Of all New Testament writers, Luke was more interested in Christ's birth and perhaps with his medical background, he lends a more intricate revelation of the individuals involved and their actions. For example:

Luke 1:7—Mary's sister, Elizabeth was barren and both she and her husband were "well stricken in years." (No other writer takes the time to point this out or dwells on the fact that Elizabeth had never been able to have children.)

Luke 1:31—The angel's announcement to Mary that "she would conceive *in her womb*." (Other writers merely say "shall conceive.")

Luke 1:59—Exact days passed (8) until time for circumcision of the child. (Other gospels never refer to time period between birth and medical attention provided for newborn.)

Luke 2:6—". . . . days were accomplished that she should be delivered." (Attention here to full-term pregnancy.)

Luke 2:21—Luke again places emphasis upon *conception in the womb* and eight-day period between birth and circumcision.

Luke 2:22—Mary's days of recovery are noted by Luke.

Luke 2:46—Reference to Jesus as a youngster visiting and talking with "doctors in the temple." (Other writers merely refer to them as "teachers of the law" or "Pharisees.")

There is much to be learned through the writings of Luke and his close personal contact with Christ's followers, and

(CONTINUED ON PAGE 60)

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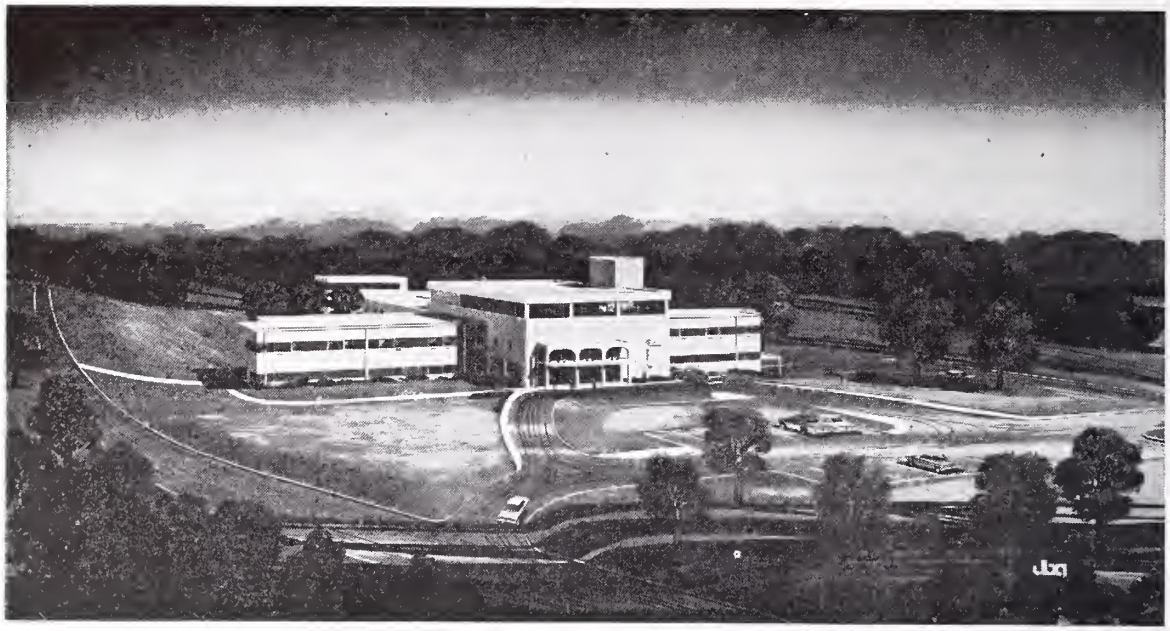
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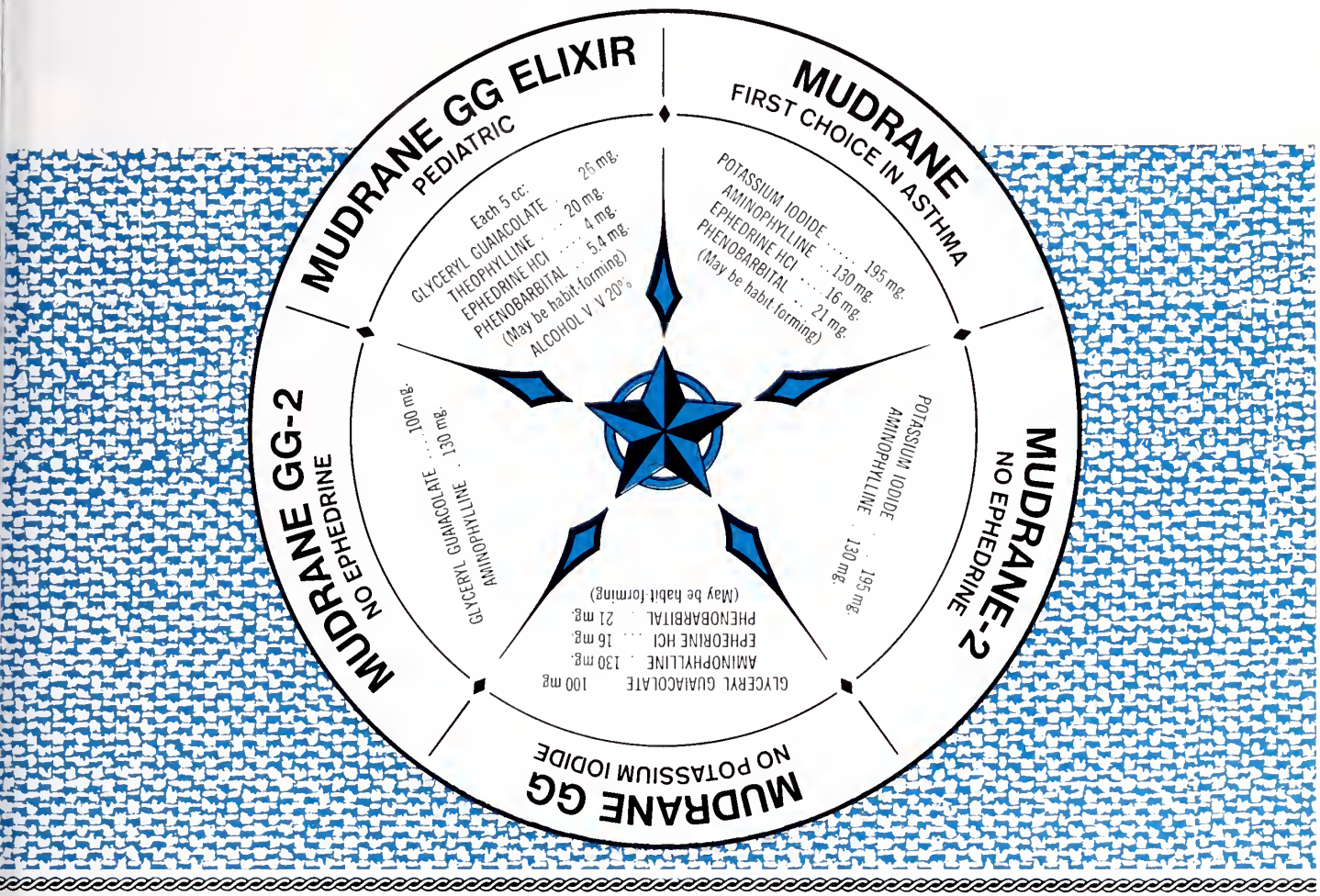
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CONTRAINDICATIONS: Aminophylline/Theophylline is contraindicated in the presence of severe cardiac arrhythmias and patients with massive myocardial damage. Ephedrine, in presence of severe heart disease, extreme hypertension, and in hyperthyroidism. Phenobarbital, in porphyria and in patients with known phenobarbital sensitivity. Potassium Iodide, in pregnancy (to protect the fetus against possible iodine-induced depression of thyroid activity), in tuberculosis (produces gumma dissolution), and in acne; also in the presence of known iodide sensitivity. PRECAUTIONS: Aminophylline/Theophylline should be avoided in patients with massive myocardial damage and/or severe cardiac arrhythmias. In children, overdose may cause vomiting, cardiac arrhythmias, and severe agitation. Ephedrine should be used with caution in the presence of severe cardiac disease, particularly arrhythmias and angina pectoris; avoid in hyperthyroidism and severe hypertension. Phenobarbital may be habit-forming. Avoid overdosage. Potassium Iodide: Discontinue in the presence of skin rash, swelling of the eyelids and severe frontal headache. Long use may cause goiter. ADVERSE REACTIONS: Aminophylline/Theophylline may cause nausea, cardiac arrhythmias, and aggravate severe myocardial disease. It may cause headaches and tachycardia. Vomiting and dizziness are not uncommon. Ephedrine: In patients hypersensitive to CNS stimulation, ephedrine may cause nervousness, tachycardia, extrasystole and ventricular arrhythmias. May cause urinary retention, especially in the presence of partial prostatic obstruction. Psychoneurosis may be aggravated. Pre-existing anginal pain will be aggravated. Phenobarbital may produce severe skin rash. Avoid overdosage. May be habit-forming. Potassium Iodide may cause nausea. Over very long period of use, iodides cause goiter. Discontinue if patient develops skin rash, eye irritation, eyelid swelling, or severe frontal headache.

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the sun and solar keratosis...

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Solar keratosis is not an uncommon medical problem.

Of course, the prevalence of keratotic lesions is greater in locations south of the 38th parallel—the so-called "Solar Keratosis Belt"—receiving the greatest amounts of solar radiation. However, solar keratosis can occur among any light-skinned population, usually in persons over 40, wherever people are subject to extended exposure to the sun.

Solar keratoses are generally not difficult to identify.

These skin lesions are usually multiple, flat or slightly elevated, brownish or red in color, papular, dry, rough, adherent and sharply defined. They are found on areas of the skin having extensive exposure to sunlight. Clinical characteristics of the lesions, their predominant location on exposed surfaces, the age of the patient and his skin type are important considerations in the diagnosis.

Solar keratoses can, and should, be treated because they are potentially premalignant.

Chronic exposure to sunlight frequently leads to degenerative changes in the skin. This can often result in the development of multiple, potentially premalignant keratotic lesions. Therefore, early detection and treatment is advisable.

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Indications: Multiple actinic or solar keratoses.

Contraindications: Patients with known hypersensitivity to any of its components.

Warnings: If occlusive dressing used, may increase inflammatory reactions in adjacent normal skin. Avoid prolonged exposure to ultraviolet rays. Safe use in pregnancy not established.

Precautions: If applied with fingers, wash hands immediately. Apply with care near eyes, nose and mouth. Lesions failing to respond or recurring should be biopsied.

Adverse Reactions: Local—pain, pruritus, hyperpigmentation and burning at application site most frequent; also dermatitis, scarring, soreness and tenderness. Also reported—insomnia, stomatitis, suppuration, scaling, swelling, irritability, medicinal taste, photosensitivity, lacrimation, leukocytosis, thrombocytopenia, toxic granulation and eosinophilia.

Dosage and Administration: Apply sufficient quantity to cover lesion twice daily with nonmetal applicator or suitable glove. Usual duration of therapy is 2 to 4 weeks.

How Supplied: Solution, 10-ml drop dispensers—containing 2% or 5% fluorouracil on a weight/weight basis, compounded with propylene glycol, tris (hydroxymethyl) aminomethane, hydroxypropyl cellulose, parabens (methyl and propyl) and disodium edetate.

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Case history for patient photographed at left on file, Hoffmann-La Roche Inc., Nutley, New Jersey.

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- ☐ one tablet q.6 h.*

Percodan® Tablets

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See Brief Summary

See dosage and administration section of Brief Summary

Whenever an APC/narcotic is indicated.

Each yellow, scored tablet contains 4.50 mg. oxycodone HCl (Warning: May be habit forming), 0.38 mg. oxycodone terephthalate (Warning: May be habit forming), 224 mg. aspirin, 160 mg. phenacetin, and 32 mg. caffeine.

INDICATIONS For the relief of moderate to moderately severe pain

CONTRAINDICATIONS Hypersensitivity to oxycodone, aspirin, phenacetin or caffeine

WARNINGS *Drug Dependence:* Oxycodone can produce drug dependence of the morphine type and, therefore, has the potential for being abused. Psychic dependence, physical dependence and tolerance may develop upon repeated administration of PERCODAN, and it should be prescribed and administered with the same degree of caution appropriate to the use of other oral narcotic-containing medications. Like other narcotic-containing medications, PERCODAN is subject to the Federal Controlled Substances Act.

Usage in ambulatory patients: Oxycodone may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery. The patient using PERCODAN should be cautioned accordingly.

Interaction with other central nervous system depressants: Patients receiving other narcotic analgesics, general anesthetics, phenothiazines, other tranquilizers, sedative-hypnotics or other CNS depressants (including alcohol) concomitantly with PERCODAN may exhibit an additive CNS depression. When such combined therapy is contemplated, the dose of one or both agents should be reduced.

Usage in pregnancy: Safe use in pregnancy has not been established relative to possible adverse effects on fetal development. Therefore, PERCODAN should not be used in pregnant women unless, in the judgment of the physician, the potential benefits outweigh the possible hazards.

Usage in children: PERCODAN should not be administered to children.

Salicylates should be used with caution in the presence of peptic ulcer or coagulation abnormalities.

PRECAUTIONS: *Head injury and increased intracranial pressure.* The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a pre-existing increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

Acute abdominal conditions: The administration of PERCODAN or other narcotics may obscure the diagnosis or clinical course in patients with acute abdominal conditions.

Special risk patients: PERCODAN should be given with caution to certain patients such as the elderly or debilitated, and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, and prostatic hypertrophy or urethral stricture.

Phenacetin has been reported to damage the kidneys when taken in excessive amounts for a long time.

ADVERSE REACTIONS: The most frequently observed adverse reactions include light-headedness, dizziness, sedation, nausea and vomiting. Some of these adverse reactions may be alleviated if the patient lies down.

Other adverse reactions include euphoria, dysphoria, constipation and pruritus.

DOSAGE AND ADMINISTRATION: Dosage should be adjusted according to the severity of the pain and the response of the patient. It may occasionally be necessary to exceed the usual dosage recommended below in cases of more severe pain or in those patients who have become tolerant to the analgesic effect of narcotics. The usual adult dose is one tablet every six hours as needed for pain.

DRUG INTERACTIONS: The CNS depressant effects of PERCODAN may be additive with that of other CNS depressants. See WARNINGS.

Aspirin may enhance the effect of anticoagulants and inhibit the effect of uricosuric agents.

MANAGEMENT OF OVERDOSAGE: *Signs and Symptoms:* Serious overdose with PERCODAN is characterized by respiratory depression, extreme somnolence progressing to stupor or coma, skeletal muscle flaccidity, cold and clammy skin, and sometimes bradycardia and hypotension. In severe overdosage, apnea, circulatory collapse, cardiac arrest and death may occur. The ingestion of very large amounts of PERCODAN may, in addition, result in acute salicylate intoxication.

Treatment: Primary attention should be given to the reestablishment of adequate respiratory exchange through provision of a patent airway and the institution of assisted or controlled ventilation. The narcotic antagonists naloxone, nalorphine or levallorphan are specific antidotes against respiratory depression which may result from overdosage or unusual sensitivity to narcotics, including oxycodone. Therefore, an appropriate dose of one of these antagonists should be administered, preferably by the intravenous route, simultaneously with efforts at respiratory resuscitation. Since the duration of action of oxycodone may exceed that of the antagonist, the patient should be kept under continued surveillance and repeated doses of the antagonist should be administered as needed to maintain adequate respiration.

An antagonist should not be administered in the absence of clinically significant respiratory or cardiovascular depression.

Oxygen, intravenous fluids, vasopressors and other supportive measures should be employed as indicated.

Gastric emptying may be useful in removing unabsorbed drug.

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DUPONT

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Indications For Prenatal Detection Of Genetic Disorders

Wayne H. Finley, Ph.D., M.D.
and
Sara C. Finley, M.D.*

Any physician who provides medical or surgical care for a patient with birth defects, mental retardation or a metabolic disorder is likely to be asked the risk for recurrence. Genetic counseling through recent developments has become a more precise science. If a specific diagnosis is known for the affected family member, the mode of inheritance and risk of recurrence often can be provided to the concerned prospective parents.

Genetic disorders with a high risk of recurrence and with a poor prognosis often have resulted in the decision to abandon the idea of having another pregnancy. These decisions have deprived the parents of an affected child of the privilege of having a normal child through a subsequent pregnancy. The other alternative often resulted in the birth of another affected child with all of the accompanying emotional and financial strain.

Today, an important aspect of genetic counseling and preventive medicine is the utilization of amniocentesis and prenatal detection of the genetic status of the fetus. While amniocentesis is a technique which has been available for a quarter of a century, it was not applied to prenatal genetic studies until the late 1960's.[10, 11]

Currently, prenatal diagnosis utilizes amniotic fluid cells obtained by transabdominal amniocentesis at approximately 16 weeks gestation at which time withdrawal of fluid has proved to be a relatively safe procedure.[2, 7] Proof that the amniotic fluid cells represented the fetal genotype provided the opportunity to preview several parameters of the genetic status of the fetus through use of cell culture techniques. The karyotype of the fetus can be prepared and various biochemical assays can be performed on the cultured fetal cells.[3, 5]

Genetic disorders are numerous and can be classified broadly into three groups: (1) Chromosomal aberrations in which the karyotype shows the abnormality, (2) Single gene disorders which may be autosomal or X-linked recessive or dominant, and (3) Multifactorial disorders which have neither an abnormal karyotype nor a characteristic Mendelian mode of inheritance.

Criteria for selection of patients to be offered prenatal diagnosis are necessitated since laboratory facilities are limited and potentially complications may arise with regard to the procedures and the interpretation of results.

All of the gross chromosomal aberrations syndroms, that is, those with either a numerical or structural abnormality, may be detected prenatally. Since Down's syndrome is the most frequently occurring autosomal trisomy, those conditions associated with an increased risk for having a child with this disorder are considered indication for prenatal studies.

Most patients with Down's syndrome have a Trisomy 21 karyotype, whereas, some have a karyotype showing either a translocation chromosome or a mosaic pattern. The maternal age effect is one of the few risk factors in Down's syndrome which can be recognized prior to the birth of an affected child. Pregnant women above 35 years of age are at increased risk for having a child with an abnormal karyotype and represent the most common indication for prenatal chromosome studies (Table 1).

TABLE 1.

RISKS FOR DOWN'S SYNDROME (DS)*

Maternal Age	<30	30-34	35-39	>40
Risk for DS[8,9]	1/1,500	1/750	1/60	1/40

*No family history and parent not a carrier.

In the majority of patients, the karyotype of the fetus will be normal and thus the family during the remainder of the gestation period is reassured. Occasionally, however, the fetus will be found to have an abnormal karyotype and the parents may elect to terminate the pregnancy.

Pregnant women above 40 years of age are at approxi-

*Laboratory of Medical Genetics and Department of Pediatrics, Medical Center, University of Alabama in Birmingham. (This laboratory is supported in part by HSMHA Project 905, General Research Support Grants RR 05300 and RR 05349 and a grant from the National Foundation-March of Dimes.)

mately 2.0-2.5 per cent risk for having a child with Down's syndrome and constitute a definite high risk group. While women 35 years or older have approximately 60 per cent of the children with Down's syndrome, they have only about 10 per cent of the births.[9] Advanced maternal age is also a factor in the other autosomal aberrations of Trisomy 18 and Trisomy 13, both of which have a devastating effect upon the infant.

A young couple who has had a child with the usual type of Down's (Trisomy 21) is at approximately 1 per cent risk for having another similarly affected child. Prenatal chromosome studies provide reassurance to those families at this increased risk during the continuation of the pregnancy. Prenatal chromosome studies are also indicated in those families in which a mother or father has been found to have a mosaic karyotype since they would be at increased risk for an affected child although a mosaic parent is relatively rare.

Down's syndrome in association with a translocation chromosome (D/G or G/G translocation) represents less than 10 per cent of the affected patients. A parent who has a child with a translocation chromosome may be, however, a balanced carrier of the abnormal chromosome. The phenotypically normal parent who is a balanced carrier is at greatly increased risk for producing an abnormal offspring. These abnormalities are usually ascertained through an affected child or during cytogenetic study of a couple with a history of repeated abortions.

The most common structural chromosome aberration syndrome is Down's in association with translocation between a chromosome 21 and a member of the D group with approximately one-half of the children having a carrier parent. Even though the recurrence risk is high when there is a G/D translocation carrier parent, the couple may elect another pregnancy since prenatal studies are available.

Since no normal germ cells can be produced by a 21/21 carrier parent prenatal diagnosis would not be helpful to such couples. These facts emphasize the need for karyotypic diagnosis of children with Down's syndrome before accurate genetic counseling is possible.

More than a hundred genetic disorders are known to be transmitted by an X-linked pattern of inheritance. Examples of these are Hemophilia A, Duchenne's Muscular Dystrophy and Nyhan's disease. Males are predominantly affected.

In Hemophilia A and Duchenne's Muscular Dystrophy, some families may wish to know the sex of the fetus so as to elect therapeutic abortion of the males. Since the specific enzyme defect is known in Nyhan's disease and can be detected in cultured amniotic fluid cells, then only the affected males need be aborted. Hopefully, the list of X-linked disorders which can be detected before birth can be extended so that the unaffected males need not be aborted.

The list of known or suspected autosomal recessive disorders includes more than a thousand[4] of which some can be detected prenatally.[2, 5] The measurement of specific enzyme activities in cultured cells is the basis for the detection of biochemical genetic disorders. Little progress has been made in the prenatal diagnosis of the approximately 1000 autosomal dominant disorders.

TABLE II.

INDICATIONS FOR PRENATAL DIAGNOSIS OF GENETIC DISORDERS

1. Pregnant women above 35 years of age.
2. Family history of a child affected with a prenatal detectable disorder.
3. Parent who is a carrier of a translocation chromosome.
4. Mother who is a carrier of an X-linked deleterious gene.
5. History of a previous child with a neural tube defect.

The reliability of a-fetoprotein levels in amniotic fluid to predict the presence of neural tube defects in the fetus now approaches 90 per cent accuracy.[1] These studies in combination with ultrasound are recommended in those women who have had a child with anencephaly, meningomyelocele or spina bifida.

In summary, indications for prenatal diagnosis of genetic disorders are listed in Table II.

In counseling families being considered for prenatal studies, it is important to consider the complications of amniocentesis. Prenatal diagnosis is dependent on the successful cultivation of cells, so occasionally a repeat amniocentesis becomes necessary if the amniotic fluid cells do not grow satisfactorily.

Expectations are that research will lead to techniques which will allow prenatal detection of an increasing number of disorders. The identification of new substrates for enzyme detection will obviously be one research area to provide new developments. A promising area is the study of gene linkage so that detection of one gene product may reflect a genetic disorder which cannot be diagnosed directly.

The National Institute of Child Health and Human Development (NICHHD) in October, 1975[6] released results of a collaborative study which indicates that amniocentesis for genetic study of fetal cells is safe and accurate if properly done. No procedure, however, is free of accident or misinterpretation.

The couple referred for prenatal genetic studies should have adequate counseling prior to the tests and should be informed of the benefits and limitations of the procedures. The amniocentesis ideally should be performed in close proximity and in collaboration with the genetics laboratory to insure optimal growth of the amniotic fluid cells.

The techniques mentioned above have tremendous potential in the prevention of the birth of a child with birth defects, mental retardation or a metabolic disorder which would seriously compromise it's quality and length of life. Perhaps of equal importance, these techniques in many instances allow a couple to have a normal child when without these developments, they would fear another pregnancy.

As pointed out by NICHHD in their October symposium on the subject, techniques are available for prenatal detection of a rapidly increasing number of genetic diseases. The implementation of making these services available depends upon funding. Bridging the gap between availability of scientific techniques and application to large segments of the population who need them presents one of the biggest challenges in preventive medicine today.

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Guidelines For Prescribers Of Controlled Drugs

The Drug Enforcement Administration (DEA), U. S. Department of Justice, has issued a set of guidelines for prescribers of controlled drugs. These guidelines contain valuable reminders of "do's and don'ts" for the practicing physician. They are as follows:

1. Keep your prescription blanks in a safe place where they can't be stolen easily. Minimize the number of Rx pads in use.
2. Write Rxs for Schedule II drugs in ink or indelible pencil or use a typewriter. They must be signed by the physician.
3. Write out the actual amount prescribed in addition to giving an arabic number or Roman numeral—in order to discourage alterations in written prescriptions.
4. Avoid writing prescriptions for large quantities of controlled drug products unless you absolutely determine that such quantities are necessary.
5. Maintain only a minimum stock of controlled drugs in your medical bag.
6. Take your medical bag with you when you're away from your automobile or lock it in the trunk.
7. Be cautious when a patient tells you that another physician had been prescribing a controlled drug product for him. Consult the physician or the hospital records—or else examine the patient thoroughly and decide for yourself if a controlled drug product should be prescribed.
8. Prescription blanks should only be used for writing prescriptions—and not for notes or memos. A drug abuser could easily erase the message, and use the blank to forge a prescription.
9. Never sign Rx blanks in advance.
10. Maintain an accurate record of controlled drug products you have dispensed—as required by the Controlled Substances Act of 1970 and its regulations.
11. Assist the pharmacist when he telephones you to verify information about a prescription you may have written. A corresponding responsibility rests with the pharmacist who dispenses the prescription.
12. Phone the nearest office of the Drug Enforcement Administration to obtain or to furnish information. Your call will be held in the strictest confidence. ■

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Innovative Board certified Family Practitioner with a minimum of 5 years or a maximum of 10 years private practice needed to assist in developing a new Department of Family Medicine. Teaching and clinical practice responsibilities. Faculty appointment. Write: Dr. Robert G. Sherrill, Jr., Chairman, Department of Family Practice, University of Alabama in Birmingham, P. O. Box 64, University Station, Birmingham, Alabama 35294, (205) 933-9211, ext. 305. Applications must be received not later than March 1, 1976. The University of Alabama in Birmingham is an Equal Opportunity M/F Affirmative Action Employer.

Thyroglossal Duct Remnants

Kenneth T. Miller, M.D.
and
Lawrence S. Fox, M.D.*

Anomalies of the thyroglossal duct are usually easily recognized by their midline position in the neck. They may be found at any level from the base of the tongue down to below the thyroid region. Adequate surgical extirpation must include the entire duct remnant in continuity with the central portion of the hyoid bone. This technique was initially described by Sistrunk in 1920.[1] Recurrence often follows operations that fail to remove the entire thyroglossal duct remnant.

This report describes the embryology of the thyroglossal duct and the hyoid bone and presents the clinical findings and the management of 42 patients with thyroglossal duct anomalies at the University of Alabama Hospital and the Children's Hospital during the past 10 years.

Embryology Of The Thyroglossal Duct

The thyroid anlage arises during the third week of embryonic life as a midline epithilial proliferation in the floor of the pharyngeal gut at a point which is later called the foramen cecum.[2] During the fourth week of development, a bilobed diverticulum forms and migrates caudally. It reaches its final position anterior to the upper trachea during the seventh week.

The gland remains connected to the floor of the pharyngeal gut during this migration by means of the thyroglossal duct. During the thyroid descent, the second branchial arches meet anteriorly in the midline to form the precursor of the hyoid bone which envelopes the thyroglossal duct. Normally the thyroglossal duct is obliterated with further development and only the foramen cecum remains.

Anomalies of the thyroglossal duct may result from incomplete descent of the thyroid gland with ectopic thyroid tissue forming anywhere between the foramen cecum and the thyroid cartilage, or from incomplete obliteration of the duct with cyst formation.[2] Thyroglossal duct remnants communicate with the skin only as a result of infection.

The epithelium of the duct can develop any disorder which arises within the thyroid gland, including cancer.[3] Functioning thyroid tissue is said to be present in 5 per cent of thyroglossal duct remnants.[4] In some rare instances, a lingual thyroid or a subhyoid median ectopic thyroid gland will contain the only functioning thyroid present in an individual. This was not observed in any of our patients.

The diagnosis of subhyoid median ectopic thyroid gland is usually not made preoperatively and these patients are often presumed to have thyroglossal duct cyst.[5, 6] Excisio of this ectopic tissue in the absence of a normal thyroi gland will result in myxedema.

Material And Methods

Records of patients admitted to the University o Alabama Hospital and the Children's Hospital from January 1, 1965 through December 31, 1974, were reviewed. Ther were 42 patients with thyroglossal duct anomalies, 24 a the University Hospital and 18 at the Children's Hospital The diagnosis was most often made during the first two decades of life, although 5 patients in our series were ove 60 years of age.

Table 1.

Age Distribution Of 42 Patients With Thyroglossal Duct Anomalies 1965 – 1974

Age	No. of Patients	Age	No. of Patie
–1 mo.	0	21 yrs. - 30 yrs.	3
1 mo. - 1 yr.	1	31 yrs. - 40 yrs.	4
1 mo. - 4 yrs.	7	41 yrs. - 50 yrs.	2
5 yrs. - 10 yrs.	9	51 yrs. - 60 yrs.	3
11 yrs. - 20 yrs.	8	– 60 yrs.	5

The white race predominated 2:1, and there were twice as many females as males. Most patients (71 per cent) presented with a mass alone although 29 per cent presented with a fistula as well, indicating previous infection.

Results

Total excision of the remnant and the central portion of the hyoid bone was performed in 37 patients with one recurrence. Among 9 patients who underwent partial excision (without excision of a portion of hyoid bone), there were 5 patients with recurrence. Total excision was subsequently accomplished in the 5 patients and none has experienced recurrence. Six patients had incision and drainage of infected cyst and 4 of these developed recurrence. One patient did not have surgery.

Discussion

The most characteristic physical finding in patients with thyroglossal duct anomalies is a midline cervical mass. The mass usually lies just below the hyoid bone. A reliable

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Table 2.

Results Of Treatment Of 42 Patients With Thyroglossal Duct Anomalies 1965 – 1974

Treatment	No. of Pts.	Results
No Surgery	1	———
Incision & Drainage	6	4 Recurrences
Partial Excision (without hyoid bone)	9	5 Recurrences
Total Excision (with hyoid bone)	37	1 Recurrence

istory of inflammation or fluctuation in size supports the iagnosis. Skin attachment and fistula formation occur only s a result of infection. Dermoid cysts, subhyoid median ctopic thyroid gland, lingual goiter and masses of the sthmus or pyramidal lobe of the thyroid gland must be onsidered in the differential diagnosis.

If there is no thyroid tissue palpable in the normal osition, a thyroid scan should be obtained to avoid xcision of the only functioning thyroid tissue. Often nfection leads to detection of the cyst. Initial treatment in uch instances should consist of antibiotics and warm ompresses. Incision and drainage should be avoided if possible as the recurrence rate after definitive excision is higher in those patients who have had prior incision and drainage.[7]

Summary

The treatment of choice of patients with thyroglossal duct anomalies is total excision of the remnant along with the central portion of the hyoid bone. There was one recurrence in 37 patients treated in this manner. In 9 patients who underwent excision without the hyoid bone, there were 5 recurrences. Re-operation for excision of the central portion of the hyoid bone was performed in these 5 and there have been no recurrences.

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MIST—Observations And Trends

Margaret S. Klapper, M.D.*
and
Irene B. Harper**

It is seldom that Alabama can claim to be first in a health field, other than alphabetically. But MIST (Medical Information Service via Telephone) is the first such person-to-person physician communication network in the country and possibly the world.

MIST has now been in operation since July 1, 1969; yet no other state, no other group has been able to initiate such a program with the same degree of success, although many are interested and are attempting to do so. To date, we have had more than 200 visitors from 25 states and three foreign countries and we have had inquiries from more than 300 individuals from 40 states and six foreign countries.

MIST has enjoyed much public acclaim, having been mentioned in *Time, Readers Digest, The Saturday Review, Patient Care Magazine, World News,* and most recently, *The National Enquirer.*

In November of 1974, Michigan began a program patterned after MIST, even called MIST, to which we contributed considerable counsel and advice. The indications are that the program is progressing satisfactorily at this time, but not growing at a rate comparable to our MIST program.

Presently, nine states are attempting to develop such a program. Mediphone, sponsored by the American Society for Contemporary Medicine and Surgery,[1] has a national program patterned somewhat after MIST. It lacks the close interpersonal aspects of MIST which, in our opinion, are so important. The responders are members of the Society and scattered over the whole country, and there is little continuity of the discussion process or joint sharing of patient care which is inherent in MIST.

Early Beginnings

Points of difficulty encountered by others include reluctance of state or county medical societies to endorse the program, reluctance on the part of departments to participate, feeling that the number of calls would be more than could be handled, or unresolved issues between o within schools concerning the program. As consultants, w have attempted to answer why MIST in Alabama shoul work so well, and in other states meet resistance.

Although our thoughts are purely speculative, we believ that the timeliness, the simplicity of the mechanics of th system, and the six-month period of discussion within th Medical Center departments, county medical societies an MASA all contributed to its acceptance.

Initially, the program was a pilot project in four countie (Dallas, Lee, Madison, and Crenshaw), with a physicia population of 200.[2] Participation in the pilot project b the Medical Center was to be by the departments o Medicine, Surgery, Dietetics and Pharmacy. Other depart ments were interested, but of smaller size, and wanted t observe the program before making commitments.

The pilot project was briefly described in the *Alabam M.D.* and the MIST number included. This is the only time the MIST number has been published and it brough unanticipated results.

MIST became state-wide and Medical Center-wide almost overnight, and at the end of three months, there was little difference in MIST use in the pilot counties and the rest of the state. Perhaps there is a message here to other states!

Questions About MIST

Questions are often raised about the MIST operators: how much training they require, how long it takes, what are the prerequisites, etc. Much to our surprise, we found that operators could be trained quite quickly in an on-job manner, partly because of our crowded conditions and the close proximity of one operator to another, thus providing backup support, answers to questions, etc.

We do attempt to teach the operators some medical terminology, although often this must be picked up on the job. Many times, the spelling or pronunciation is quite amusing and the questions even more so, such as "What is familial angi-erotic edema?"

Apparently, the personal qualifications of the MIST operator are more important than experience or educational background. A pleasant voice, good diction and an interest in people are essential, as well as patience and the ability to "keep cool" under stress.

Presently, most of the operators are young wives of

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edical students or other students at UAB. The turnover is iite rapid, due partly to the short duration of the udents' period of school attendance and partly because, as ie girl put it, "There is only one MIST program and I am ›ing to be working for years, so I need to keep up my cretarial skills."

Medical students are also used as operators on a part-time isis from time to time. At the outset, there was one MIST perator and a metered incoming and metered outgoing ATS line. Now, there are four incoming and three itgoing lines, six MIST operators and a coordinator.

Numerous questions are raised as to the financial support f MIST, the costs and why doctors are not charged a iembership or fee for calls. Initiation and support of the rogram for three and one-half years was largely through nancial support by Alabama Regional Medical Program ARMP) and some AMA-ERF funds. During one of the ritical periods of ARMP support, contributions from labama physicians helped maintain the program until state ipport was obtained.

The state now provides base support, but it is inadequate or the total support of the MIST office. Presently, the ffice is supported through these state funds, annual ontributions from the AMA-ERF and Caduceus Club of he School of Medicine, and some support from three ponsored projects–the Comprehensive Cancer Center, the ARMP Arthritis Outreach Pilot Project and an ARMP roject for extending the MIST services to other health rofessionals.

Our thinking on the matter of financial support is that if he MIST services are for the benefit of all people in Alabama, then MIST must be available to all physicians and ealth professionals, and therefore must be supported inancially in some all-inclusive manner. The cost of the IIST office, including salaries of operators, coordinator, elephones, and office supplies at this time is approximately 120,000 per year.

The faculty time provided in the program is the ommitment of the Medical Center to the program, but if a ost analysis were possible, it would include calculations of aculty time and faculty equivalents required for MIST. A onservative estimate is that the equivalent of 2.8 full-time aculty members is now required for responding to MIST alls. (The average length, number of calls and patient-eaching contact time estimates for faculty were used to rrive at this figure.)

Services Of MIST

In 1971, the Dial Access Tape libraries (DATL) for hysicians and nurses were added to MIST as an additional service. These include 400 tapes for physicians and 50 tapes for nurses purchased from the Wisconsin Library. Purchasing the M.D. Anderson tapes on cancer was under consideration at the time these were made available through the Southern Medical Association (SMA)[3] to all physicians in the states served by SMA.

MIST has always responded to calls from health professionals other than physicians, but the program was designed for and will continue to be directed primarily toward physicians in their day-by-day care of patients.

However, during the past year, with additional ARMP support, a concerted effort was made to reach health professionals other than physicians, inform them of the service and invite their participation. The method of reaching these groups was essentially the same as that used originally in MIST.

The faculties of each of the other schools of the Medical Center were informed in detail about the MIST service and the endorsement of the deans secured. The respective state professional societies were then provided information and their endorsement requested and received.

Then, and only then, were the memberships of these societies sent information about MIST and invited to utilize the service for the benefit of their patients. Table 1 indicates the changes in utilization by other health professionals following this information.

MIST has been written into a number of special service or clinical research programs. It is a convenient, familiar and ideal manner of communication in programs which "reach out" from the Medical Center, or one might equally well say "reach into" the Medical Center. At times, during slack hours, MIST is utilized to contact practicing physicians about patients who have been seen through various sponsored programs within the Medical Center. Many Alabama physicians have been called by the Cardiology Division for follow-up of patients seen in the MIRU unit.

MIST is written into the Cancer Communication Project of the Comprehensive Cancer Center and was recognized by the support source as being an integral part of the overall program.

In the breast cancer project, MIST is the communications mechanism. In the leukemia and Hodgkins disease projects, MIST is the communications link which makes it not only practical, but convenient for patients to be cared for at home locations with discussions as necessary with those at the Medical Center and occasional visits to the Medical Center for special procedures, tests or specialized care. These are representative of true "shared-care" of patients, with MIST serving as a integral part.

The special arthritis project also utilizes MIST. It, too, is an outreach program in which clinics are being established

	1973-74				1974-75			
	Dec.	Jan.	Feb.	Total	Dec.	Jan.	Feb.	Total
Nurses	68	112	82	262	56	90	96	242
Dentists	0	4	6	10	6	27	33	66
Optometrists	0	7	5	12	8	28	19	55
Total	99	187	132	418	161	281	245	687

Table 1.
MIST Incoming Calls
Other Health Professionals
(A 3-Month Comparison)

at Mobile, Tuscaloosa and Huntsville. MIST makes possible immediate contact between those in these areas and the individuals in the Rheumatology Division at the Medical Center. As protocols are written for other special programs in the Medical Center, it is anticipated MIST will be included even more frequently as the communication system between the local physician and the project director.

MIST has been particularly helpful in the care of the high-risk pregnancy and of the critically ill newborn. Discussions of the woman with high-risk factors goes on throughout her pregnancy.

Some of the most rewarding observations in the MIST office are reports by practicing physicians when a woman who has been followed jointly throughout pregnancy with Rh factor, or other type of complication, delivers a healthy baby.

It was early recognized by our neonatologists that MIST greatly facilitated the communications about critically ill or low birthweight infants born outside the Medical Center. The neonatologists here promptly became some of the most ardent supporters of the MIST program.

It was gratifying recently to hear a young neonatologist state that babies brought to the nursery here are usually in much better condition than those he was accustomed to seeing in another location. He attributed this largely to the advice and counsel promptly available through MIST and to the "talking in" of the infant, including immediate supportive procedures, and prompt transportation.

Time is of utmost importance in this group of patients, not only as a lifesaving mechanism, but to spare the individual permanent disability. Study by the neonatologists here in 1972-73 demonstrated a greater fall in infant mortality in those counties which utilized MIST to the greatest extent, and morbidity records are equally encouraging.

One hundred fifty-five calls over a consecutive two-day period were studied for details. Table 2 shows the breakdown of these calls.

Table 2.

Analysis of 155 Consecutive MIST Calls

Type of Call	Number	Per Cent
Patient Discussion	47	30
Shared-Care Patients	15	10
Patient Progress Reports	16	10
Referrals	43	28
Technician and Special Tests	9	6
Library and Bookstore	11	7
Administration and Education	14	9
Total	155	100

"Shared-Patient-Care" Calls

There is an increasing number of what we refer t "shared-patient-care" calls—patients who are seen onc intermittently at the Medical Center with continuing locally, progress reports being called over MIST either or out" depending upon where the patient is at moment. This is particularly evident in the area oncology, where patients are apt to be cared for over l periods of time by their local physicians in concert v those at the Cancer Center.

But "joint care" or "team care" of patients with ac serious or complicated illnesses is also essential to g medical care and special Medical Center resources expertise is of increasing importance in such care. Refe reflect there resources, most being for special examinati procedures or surgery not available elsewhere.

Forty-eight of Alabama's 67 counties have 25 or fe physicians, and the greatest percent of MIST users found in these counties. Table 3 summarizes this obse tion.

Table 3.

MIST Use By Counties

	– 50%	50-79%	80-100%	Total Count
– 25 MD's	4	18	26	48
– 25 MD's	1	11	7	19
Total	5	29	33	67

Conversational Interchange

Visitors from other schools are particularly amazed the informality and degree of rapport between Medi Center faculty and practicing physicians. This informali and friendly rapport is, to us, not only evidence, but one the reasons for the success of the MIST program. conversational interchange between colleagues in practi and those at the Medical Center is established, a degree trust, friendliness and mutual respect is evident.

Many MIST calls reflect the drama, or more correctl the ministry of medicine and throughout the conversatior the anxiety and concern for the patient can be discerned, both faculty member and practitioner. Many could summarized as "sweating it out together." By the san token, the sense of gratification, relief and exultation ca be observed in other conversations when patient progress being reported or a favorable outcome has ensued after period of great concern.

Those of us providing the MIST service had anticipate its use leveling off by the third year, but such has not y been observed,[4] although we are well into the sixth year operation, and the total number of calls now exceed 98,000.

The anticipated increase in use by the other healt professionals when a concerted effort was made to reac them is occurring, but its use by these groups is no

ected to approach that of physicians. Most of their stions pertain to techniques, procedures, equipment or ices. Problems presented by physicians are so specific to individual patient that they are seldom applicable to er patients.

t is this very high degree of specificity which makes the son-to-person discussion so essential and the reason ed recordings seldom provide the physician with exactly at he needs at a particular moment in caring for a ient.

Summary

As regional centers for neonatal care, cancer treatment, uritis, etc. occur, it is anticipated that there will be more ared-care" of patients. As new protocols of investigation therapy are developed, MIST is apt to play a part in the nmunications network for these programs. It is likely t there will be direct MIST lines between certain jects, and we have been experimenting with that sibility between the neonatal nursery at Huntsville and one here at the Medical Center.

Thus MIST will continue as an extension service of the dical Center to bring its resources to physicians and lth professionals of the state in a manner which is ple, speedy, and practical. The program will continue to shaped by and respond to the needs of practicing ysicians and other health professionals.

MIST and the success of MIST have been dependent upon four essentials. These are (1) the willing and cooperative Medical Center faculty and administration; (2) the practicing physicians who wish to use all the resources available for the benefit of their patients; (3) the quick and easy access of the one to the other through the telephone and specially trained operators; and (4) the necessary financial support for the MIST office.

The answer to the success of MIST can best be summarized in the words of Richard W. Shropshire, a family practitioner in Wisconsin, who, when referring to continuing education, said, "I used to say that anything I learned was good, any knowledge was good just because God made it. Now I am more discriminating. I go after knowledge that will be of some value to me and my practice."[5]

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Transactional Analysis For The Physician: Psychological Scripts

Taras J. Cerkevich, Ph.D.*

Last In The Series

In previous articles in this series, the structure of personality, psychopathology, interpersonal behavior and psychological games were featured. In this final article, psychological scripts, their function and nature will be discussed.

The Nature of Scripts

Eric Berne[1] observed that a number of people often lead their lives in a story book fashion; i.e., he observed that the whole life course of a number of his patients often followed, almost step for step, the action of certain myths, fairytales, historical figures, comic book characters and the like.

Berne used the word "script" to describe the life course of an individual. Like theatrical scripts, psychological scripts are rehearsed. The individual rehearses his or her script in the imagination thereby casting, choosing lines and roles, and creating plots and themes that all lead to a climax—an ultimate conclusion.

Thus, a psychological script is an ongoing program for living which determines where an individual will go in life and how he or she will get there. A script is often acted out compulsively, even in the face of pain, misery and misfortune. In fact, a script may even call for such happenings.

Berne used the word "scripting" in order to emphasize that the individual's behavior is *not* the spontaneous product of the exercise of "free will". Rather, an individual's behavior is the result of psychosocial programming by parental figures who act as the main transmittors of cultural, sub-cultural and familial patterns of behavior.

Insofar as a culture, sub-culture or family has an expectation of "how people should act", it may be s that these entities also follow scripts of their own. Cultu scripts dictate the norms for behavior for a whole group people. Thus, in American culture, boys and girls a scripted to "grow-up", become "mature" and "respon ble," get married, have a "nice house", "raise the kids retire and live happily ever after. People who don't follo this script are considered to have "something wrong" wi them and they are labelled immature, irresponsible, unse tled, rebellious, and unhappy.

Cultural scripting, for example, dictates table manner In our culture it is considered impolite and rude to bu and flatulate during a meal, which in some Arab cultur not to do so would be taken as an insult to the host. Italy, men are supposed to act emotionally, often givi way to tears. Italian men are permitted to touch and hu each other. These same behaviors in a British male migh earn him a homosexual label.

Subcultural scrips dictate the behavioral expectations fo the members of the various subcultures within the large subculture. Thus, while Americans of Jewish and Christia faiths both pledge allegiance to the same American fla (cultural scripting), a number of Jewish people in th United States celebrate Channukah and Passover whil other Americans celebrate Christmas and Easter.

Table manners, as another example, may also differ fror subculture to subculture: German Americans, who originat ed from families that were of a high social class in "the ol country" feel that the "proper" way of eating is by holdin the fork in the left hand and the knife in the right hand a all times. On the other hand, most Americans of high socia standing in the Southeast feel that the "proper" way to ea is by holding the fork with the right hand at all time except when cutting is required, at which time one place the fork in the left hand and the knife in the right hand.

As stated previously, the family is the main transmitte of cultural and subcultural scripting. Thus, a child of German mother of semi-aristocratic stock and a Ukrainia father of Kulak origins who immigrates to the United State from postwar Germany will grow up with a number o widely varying cultural and subcultural influences that th child of white, Anglo-Saxon, Protestant parents does no have to deal with.

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In addition to transmitting the cultural and subcultural scripting, the family also transmits the family scripting of the grandparents. In other words, the families that people come from also have expectations for the behavior of it's members. Family members who don't follow these expectations are considered to be "black sheep".

Family scripting can be easily detected in family members from their speech: ". . .We Grahams come from a long line of educators. . . A Smith woman always walks with dignity. . . There's always been one bad seed in our family and if you keep it up, you'll turn out just like your Uncle Jimmy. . . Our family has supplied the Marines with a son ever since 1902. . ." Thus, physicians, teachers, lawyers, drunkards, prostitutes, nuns, winners and losers run in families.

The Individual and his Script

The individual's psychological growth, then, is influenced by cultural, subcultural and family scripting. In addition, the individual also has his or her own unique, individual script. This scripting begins the moment the child is conceived. After the child is born, further scripting continues while the child interacts with the parents during play, feeding, washing and toilet training.

It is during these situations that the child receives certain messages, both verbal or non-verbal about itself. These messages can be catergorized into three types: injunctions, permissions and attributions.

Injunctions are those messages which forbid certain behaviors: "Don't slurp your soup ... don't lie ... don't steal ... Stop it ... Don't bother me anymore ... Don't think ... Don't grow up ... Don't be like your father ... Shut up..." Thus, injunctions inhibit. They inhibit both healthy behaviors and negative behaviors.

Permissions are messages which encourage certain behaviors: "Be a man ... Go ahead ... Take a drink ... It is ok to steal, just don't get caught ... Be a bum and see if I care ... I guess if you really want to hurt your mother nothing is going to stop you..." Permissions, then, encourage both healthy behaviors and negative behaviors.

Attributions are predictions of behavior that parents repeatedly assign to children: "You're going to be just like your father (alcoholic), I could see it in the stars the day you were born....Poor child! Born on Friday the 13th What will you ever do ... My Minnie is just so shy! I just don't think she'll be able to handle boys when she goes to high school next year. . . Charles isn't like all the other boys! He just loves to stay inside! Don't you dear?" Attributions, then, set up expectations which parents goad their children to fulfill.

Both parents have a role in the formation of the script. According to Berne[1], the parent of the opposite gender sets the goals for the child while the parent of the same gender shows the child how to achieve those goals. Thus, Claude who believes that, "Women stink and women are whores" will probably marry Bernice, a woman who will prove his point: she wears excessive make-up in poor taste, flirts too much, reads movie magazines and the like.

When Claude and Bernice have a daughter, Ruby, Claude will probably convey his not-Ok feelings about women to Ruby by such statements as, "Damn women, you can't ever trust them ... You're just like your mother—always trying to get away with things ... Look at yourself: Your dress is too short."

Mother, who is supposed to be the gender role model of female behavior to Ruby, will, of course, teach her daughter how to wear make-up, how to dress alluringly, how to act flirtatiously and get away with it. Bernice, in addition, also has some not Ok feelings about men. She believes that, "Men are bums" and Claude is her third bum in a row.

Claude has a hard time keeping a job. He also likes to drink excessively. And so when Claude and Bernice have a son, Lester, Bernice may tell the boy, "Come on, grow up, be a man." Lester may look at the male model that is available to him, his father, and become a "man". . . drinkin', cussin', whorin'..

On the other hand, if Anna and Zeke, who both believe that people of the opposite gender are OK, got married and had a male child, Christian, and a female child, Edith, the story might run a little differently.

Zeke, who wants his daughter to "be a lady", would put Edith in Anna's care. Anna would teach Edith how to sew and cook, how to wear make-up attractively, how to speak and the like. Christian, whose mother wants him to "be a doctor", will be programmed by Zeke on how to study, how to assume leadership, how to find a job and the like.

In addition to receiving the programming of injunctions, permissions and attributions, the child also receives what Claude Steiner[2] calls "basic training" in one or more of three "hypnotisers": mindlessness, lovelessness and joylessness.

An individual trained in mindlessness in early childhood receives injunctions that inhibit his thinking and data processing faculties. The result is that the individual feels that he or she has no control over the course of life. Their verbiage is garnished with such statements as: "I can't...no matter how hard I try, I can't ... I don't know what's wrong with me ... maybe I'm stupid or something...I must be going crazy ... I don't know what I want..." The extreme result of mindlessness is, of course, admission to a mental hospital.

An individual trained in lovelessness comes from an environment in which strokes are at a premium and the child is enjoined against giving or receiving affection. The individual then suffers from a chronic stroke hunger. The net result is various degrees of depression accompanied by feelings of being unloved and/or unlovable. The extreme of lovelessness is suicide.

An individual trained in joylessness is trained to disregard bodily sensations or messages, whether pleasant or unpleasant. Unpleasant sensations, instead of being explored and studied, are drugged away ("Where's the aspirin") while indulgence in pleasant sensations is forbidden. The result is that the person trained in joylessness feels he or she has lost control. Addiction to cigarettes, aspirin, food, coffee and, in severe cases, alcohol and the more lethal drugs, sold only on the street, develops.

The process of scripting the individual, then, is a three step process: a.) Through the medium of the family, the individual learns cultural, subcultural and familial expectations of behavior. b.) The individual's behavior is programmed in early childhood through the medium of injunctions, permissions and attributions. The parent of the opposite gender sets the goals while the parent of the same gender teaches the child how to attain those goals. c.) The individual receives basic training in mindlessness, lovelessness and joylessness.

Executing the Script

Given these influences, then, the child, early in life, evolves a life plan. The life plan gives the child a *modus operandi* for dealing with the three aforementioned factors. The theme of the life plan (script) of an individual can usually be characterized in a few words just as may be done with the theme of a play or fairy tale, e.g., carrying my cross, pulling a fast one, raising hell, making it, succeeding – then failing, looking for the pot of gold at the end of the rainbow, showing them, etc. The themes are as plentiful as are the people in this world.

Berne[1] recognized 6 major script patterns that people tend to follow:

1. **Never** scripts forbid a person from having or doing what he or she may most want. (sex is bad, so don't do it").
2. **Always** scripts curse a person into a continuous, seemingly unbreakable behavior pattern. (Stay busy ... keep drinking ... keep smiling).
3. **Until** or **before** scripts place conditions on happiness so that happiness cannot be experienced until a certain event has passed or a certain act has been performed. ("Life begins at forty ... You'll only be happy after you've finished college").
4. **After** scripts curse a person to unhappiness after a certain event has passed or a certain act has been performed ("You'll know how hard life is once you've gotten married ... It's downhill all the way after you hit 40").
5. **Over and Over** or **Almost** scripts allow a person to succeed – almost. ("Almost made it in the stock market ... I almost finished college ... I almost get the job done but something always comes up.")
6. **Open ended** scripts instruct people what they are to do until a certain time passes or even occurs. After that point, they blunder about until they die. ("Now that I'm retired, I just don't know what to do with myself ... Life was just so busy when the kids were at home, but now that they've gone to college I'm just so bored").

Through the medium of games, scripts are lived out to their conclusion – their ultimate payoff. There are three types of payoffs: hamartic or losing, banal (sometimes known as non-winning, in-between or at least) and winning. A loser, is one who knows what he will do **if** he wins. Losers do not get what they want. Losers talk about winning, but never perform any effective actions to achieve their goals. Losers generally have four major types of payoffs to choose from: be a bum, go crazy, drop dead or get lost.

In-betweeners or at leasters are just that: in-between losers and winners. They make such statements as, "I know I married a slob, but at least I'm not an old maid...I might not be making as much as my brother does, but at least I've got a good retirement plan." Their payoffs are not as dramatic as those of the loser. They are willing to settle, for example, for a lifetime of complaining without changing anything, constantly dieting without losing weight, frequent headaches, eyestrain and depression, or quiet suffering of life's vicissitudes accompanied by constant insomnia and excessive smoking, etc.

A **winner** is one who knows what he will do if he loses. Winners get what they want. Although winners may talk about winning, their words are accompanied by effective action that will get them what they want. A winner, then, is one who decides that he wants a Ph.D. in biochemistry by age 28, a $40,000 home, a $35,000 year salary, an intelligent wife and three children.

If our friend, Sylvester, gets what he wants, he is a winner. On the other hand, if Sylvester only gets an MA in science education, by age 27, buys a $36,000 home, moonlights as a cab driver to make ends meet, has four children and a wife who dropped out of junior college because it was too hard, then he is an in-betweener.

Finally, if Sylvester starts off in college and majors in chemistry but then flunks out in his junior year, starts pushing heroin and cocaine, making $20,000 in each deal, lives with a woman who is a junkie, spends 7 years in jail and finally gets killed in a shoot-out with the police, then he is a loser.

For the physician well versed in transactional analysis, knowledge of psychological scripts can act as a map that will tell the physician where the patient has been, psychologically speaking, where he or she is going to and how he or she will get there.

Conclusion

This is the last installment in this five part series of *TA for the Physician.* After a general introduction that compared TA to other methods of behavioral analysis, the reader was introduced to the concepts of ego states, psychopathology in terms of ego states, stroking hunger, time structure, psychological games and psychological scripts. I have attempted, in this series, to give a general introduction to TA that could be easily comprehended by all physicians regardless of training.

Psychiatrists may find this series most useful to them in their work. As far as non-psychiatrists are concerned, it is hoped that this series has increased their ability to spot psychological problems more rapidly and deal with them more effectively either by referral to competent psychologists and psychiatrists or by short term crisis intervention.

REFERENCES

1. Berne, Eric. What Do You Say After You Say Hello? New York: Grove Press, 1972.
2. Steiner, Claude. Scripts People Live, New York: Grove Press, 1974.

BY LARRY DIXON

Continuing Medical Education

CME FACT SHEET: A STORY OF GROWTH

[The physician's attitude regarding continuing medical education (cme) and the concept which serves as the base for cme endeavors has quickly permeated the atmosphere surrounding American Medicine. Physicians and their organizations have become increasingly aware of the benefits both scientific (clinical) and practical (public relations) as evidenced by the following information.]

A Condition Of Membership

State medical associations which have made a policy decision to require cme as a condition of membership, but not all of whom have been able to implement this decision as of October 1, 1975 include: Alabama, Arizona, Florida, Kansas, Maine, Massachusetts, Minnesota, New Jersey, North Carolina, Oregon, Pennsylvania and Vermont.

Medical specialty societies which have made a policy decision to require cme as a condition of membership, but not all of whom have been able to implement this decision as of the same date include: American Academy of Family Physicians, American College of Emergency Physicians, American College of Radiology, American Psychiatric Association, American Society of Abdominal Surgeons and American Society of Plastic & Reconstructive Surgeons, Inc.

To date, the only medical specialty board which has made a policy decision to require recertification is the American Board of Family Practice.

A Condition For Re-Registration

Medical practice acts in seven states give the State Board of Medical Examiners authority to require evidence of cme as a condition for re-registration of the license to practice medicine. They are: Kansas, Kentucky, Maryland, Michigan, New Mexico, Ohio, Washington and *Wisconsin.

The Boards of Medical Examiners of Maryland and New Mexico have established criteria and are implementing this requirement. The Physician's Recognition Award fulfills the requirement of both the Maryland and New Mexico Board of Medical Examiners' requirements. The law in Michigan requires the State Board of Medical Examiners to initiate a continuing medical education requirement for re-registering the license to practice medicine, beginning in December, 1976.

The law in Ohio States, "Every doctor of medicing licensed to practice medicine or surgery within this state shall, on or before the first day of January of every third year after the 1977 registration, apply to the state medical board for a certificate of triennial registration with the board upon an application which shall be furnished by the board. **The applicant shall include satisfactory evidence to the board that in the preceding three years the practitioner had completed one hundred fifty hours of continuing medical education certified by the Ohio State Medical Association and approved by the board.**

*(The state of Wisconsin has recently enacted malpractice legislation requiring 15 hours of annual CME credit for relicensure, starting in 1977, as a requirement for licensure.)

Physician's Recognition Award

The Physician's Recognition Award (PRA) provides a means for documenting CME for all physicians in any field of medicine. Programs for certifying CME are in operation in the states of Arizona, California, Oregon and Pennsylvania. Criteria for certification adopted by the New Jersey Medical Society and the Pennsylvania Medical Society are identical to those of the PRA. The American Medical Association (AMA) assists the state associations of Arizona and Pennsylvania, the American Society of Clinical Pathologists and the College of American Pathologists in review and evaluation of the applications from their membership for their Certificate in CME. The PRA program endorses the CME programs for the following organizations: American Academy of Family Physicians, American College of Obstetricians and Gynecologists, American Society of Clinical Pathologists, College of American Pathologists, Arizone Medical Association, Inc., California Medical Association, Oregon Medical Association and Pennsylvania.

(CONTINUED ON PAGE 38)



SIGHTS & SOUNDS

The following films are made available from Eaton Medical Film Library. They may be obtained by either contacting your local Eaton Representative or by writing to Eaton Medical Film Library, Eaton Laboratories Division, Morton -Norwich Products, Inc., Norwich, New York 13815.

THE THORACOABDOMINAL RETROPERITONEAL LYMPH NODE DISSECTION (831) Donald G. Skinner, M.D.—Radical retroperitoneal lymph node dissection is an effective and proven way of curing patients with non-seminomanous testis tumors. We have reason to believe that there is definite advantage to the use of the thoracoabdominal approach to retroperitoneal lymph node dissection. This approach allows for the complete dissection of the retroperitoneum above the region of the renal pedicle so that the en bloc dissection can begin at the diaphram. This film demonstrates both the right and left side approach, first in a patient without metastic disease and then in considerable detail in a patient with extensive left retroperitoneal metastases. Appropriate x-rays diagrams and commentary are included. 16 mm, color and sound, 25 minutes (1973)

SURGICAL TECHNIQUE FOR CORRECTION OF COMPLETE URINARY INCONTINENCE (846) Emil A. Tanagho, M.D. Detailed demonstration of a surgical technique successfully applied for correction of post-prostatectomy total urinary incontinuence. Animation and art work clarify various steps. It is essential for those interested in trying this technique. 16 mm., color and sound, 15 minutes (1973) IV

PERINEAL PROSTATECTOMY (837) Otto M. Lilien, M.D. This film demonstrates a modified Hudson/Belt (simple) perineal prostatectomy, stressing surgical detail. After exposure of Denonvillier's fascia and the posterior capsule, a prostatic biopsy is obtained, and then the enucleation performed. Emphasis is made concerning the technique and importance of post-prostatectomy perineal exercises and their relationship to urinary continence. 16 mm., color and sound, 15 minutes, (1972) IV

SURGICAL REPAIR OF PEYRONIE'S DISEASE WITH DERMIS GRAFT (847) Charles J. Devine, Jr., M.D. We repair Peyronie's disease by resecting the plaque and covering the defect in the tunica albuginea with a graft of dermis obtained from the skin of the abdomen. This film demonstrates the pathology of peyronie's disease and depicts a surgical procedure using the above technique. 16 mm., color and sound, 14 minutes (1973)

CATHETER CARE AND USE (833) Rainer M. Engle, M.D. Basic alternations in the lower urinary tract produced by an indwelling Foley catheter are presented. This development of infections and stone formation in patients with indwelling catheters is discussed and a plan for prevention of such problems is presented. The advantage of inert catheters over those of presently used material is stressed. The basic principles of sterile handling of a catheter, bladder irrigation, and frequency of catheter changes are reviewed. 16 mm., color and sound, 15 minutes, (1972) IV

SURGERY FOR MULTIPLE STONES IN THE KIDNEY PELVIS AND CALYCES (836) Francis A. Beneventi, M.D. Demonstration of surgical technique on a fresh human autopsy kidney, plus artists' illustrations precede the film of the actual surgery. Exposure provided for easy access to fragmented or multiple stones in the renal pelvis and calyces is shown. 16 mm., color and sound, 17 minutes (1972)

SEGMENTAL URETHERAL ACHALASIA (823) Victor A. Politano, M.D. This film illustrates the author's method of handling a large, dilated ureter secondary to ureteral achalasia. The achalasic segment is resected, the ureter is reduced by removing a longitudinal strip from its entire length, and the distal end is reimplanted into the bladder by submucosal tunnel technique. 16 mm., color and sound, 14 minutes (1971)

CME FACT SHEET: A STORY OF GROWTH (CONTINUED FROM PAGE 37)

This means that any physician qualifying for these programs is also considered qualified for the PRA. In the states of Pennsylvania and Arizona, the PRA certificate is issued, as well as the state certificate, for CME. For the other organizations, a simple statement by the physician on his application for the PRA and the application fee is all that is needed. He need not complete the details of the application form.

Criteria for the PRA

	Credit Hour Limit
Category 1—CME Activities with Accredited Sponsorship (60 hours required)	No limit
Category 2—CME Activities with Non-accredited Sponsorship	45 hours
Category 3—Medical Teaching	45 hours
Category 4—Papers, Publications, Books and Exhibits	40 hours
Category 5—Non-supervised Individual CME Activities	45 hours
Category 6—Other Meritorious Learning Experiences	45 hours

A total of 150 credit hours are required over a 3-year period with a minimum of 60 credit hours required in Category I.

DYAZIDE®

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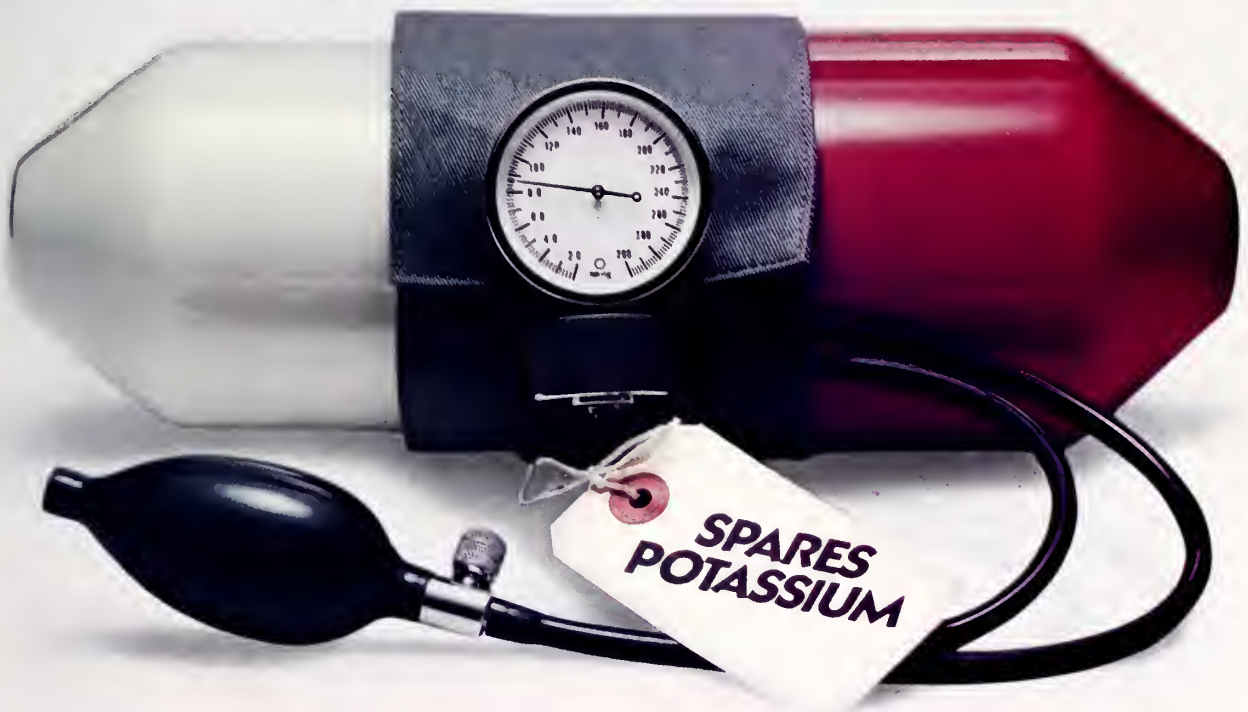
Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

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the "empty nest syndrome"

TRIAVIL®

containing perphenazine and amitriptyline HCl
a tranquilizer-antidepressant

for depression with moderate anxiety

in many cases a result of the "empty nest syndrome"

The mid-life crisis: a critical crossroad

Preparation for change—intellectually, vocationally (or avocationally), and emotionally—can often help the menopausal-aged woman cope successfully with a new and different role after the children are grown and gone. Even when these changes have been anticipated and prepared for, a mid-life depression with moderate anxiety is not uncommon—a syndrome often uncontrolled by counseling or other appropriate measures and for which specific medication may be required.

When depression with moderate anxiety persists, TRIAVIL can often help

TRIAVIL provides a highly effective antidepressant and tranquilizer for symptomatic relief of *both* depression and coexisting moderate anxiety. The patient may be able to function more effectively in her daily life.

Many symptoms associated with depression and anxiety such as insomnia, fatigue, anorexia, and functional G.I. complaints, are frequently alleviated. More complete symptomatic relief is usually afforded than with an antidepressant or a tranquilizer alone. In fact, when anxiety masks the depressive state, treatment with just a tranquilizer may deepen the depression and delay symptomatic improvement.

Advantages of the two components in TRIAVIL taken together

A single tablet containing both an antidepressant and a tranquilizer encourages patients to take medication properly and reduces the risk of dosage confusion and error. Cost of therapy to the patient is usually less. To date, clinical evaluations have revealed no undesirable reactions peculiar to the combination. Tablets TRIAVIL are available in four different combinations affording flexibility and individualized dosage adjustment.

Treatment with TRIAVIL—a balanced view

Contraindicated in CNS depression from drugs; in the presence of evidence of bone marrow depression; and in patients hypersensitive to phenothiazines or amitriptyline. Should not be used during the acute recovery phase following myocardial infarction or in patients who have received an MAOI within two weeks. Patients with cardiovascular disorders should be watched closely. Not recommended in children or during pregnancy. The drug may impair mental or physical abilities required in the performance of hazardous tasks and may enhance the response to alcohol. Antiemetic effect may obscure toxicity due to other drugs or mask other disorders. Since suicide is a possibility in any depressive illness, patients should not have access to large quantities of the drug. Hospitalize as soon as possible any patient suspected of having taken an overdose.

For additional prescribing information, please turn to the following page.

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for highly effective relief of depression with moderate anxiety

TRIAVIL®

containing perphenazine and amitriptyline HCl a tranquilizer-antidepressant

Available:

TRIAVIL® 2-25: Each tablet contains 2 mg perphenazine and 25 mg amitriptyline HCl

TRIAVIL® 2-10: Each tablet contains 2 mg perphenazine and 10 mg amitriptyline HCl

TRIAVIL® 4-25: Each tablet contains 4 mg perphenazine and 25 mg amitriptyline HCl

TRIAVIL® 4-10: Each tablet contains 4 mg perphenazine and 10 mg amitriptyline HCl

INITIAL THERAPY FOR MANY PATIENTS
TRIAVIL® 2-25 (or TRIAVIL® 4-25) t.i.d. or q.i.d.

FOR FLEXIBILITY IN ADJUSTING MAINTENANCE THERAPY
TRIAVIL® 2-10 (or TRIAVIL® 4-10)

CONTRAINDICATIONS: Central nervous system depression from drugs (barbiturates, alcohol, narcotics, analgesics, antihistamines); bone marrow depression; known hypersensitivity to phenothiazines or amitriptyline. Do not give concomitantly with MAOI drugs because hyperpyretic crises, severe convulsions, and deaths have occurred from such combinations. Allow minimum of 14 days between therapies, then initiate therapy with TRIAVIL cautiously, with gradual increase in dosage until optimum response is achieved. Not recommended for use during acute recovery phase following myocardial infarction.

WARNINGS: TRIAVIL should not be given with guanethidine or similarly acting compounds. Use cautiously in patients with history of urinary retention, angle-closure glaucoma, increased intraocular pressure, or convulsive disorders. In patients with angle-closure glaucoma, even average doses may precipitate an attack. Patients with cardiovascular disorders should be watched closely. Tricyclic antidepressants, including amitriptyline HCl, particularly in high doses, have been reported to produce arrhythmias, sinus tachycardia, and prolongation of conduction time. Myocardial infarction and stroke have been reported with tricyclic antidepressant drugs. Close supervision is required for hyperthyroid patients or those receiving thyroid medication. Caution patients performing hazardous tasks, such as operating machinery or driving motor vehicles, that drug may impair mental and/or physical abilities. Not recommended in children or during pregnancy.

PRECAUTIONS: Suicide is a possibility in depressed patients and may remain until significant remission occurs. Such patients should not have access to large quantities of this drug.

Perphenazine: Should not be used indiscriminately. Use with caution in patients who have previously exhibited severe adverse reactions to other phenothiazines. Likelihood of untoward actions is greater with high doses. Closely supervise with any dosage. The antiemetic effect of perphenazine may obscure signs of toxicity due to overdosage of other drugs or make more difficult the diagnosis of disorders such as brain tumor or intestinal obstruction. A significant, not otherwise explained, rise in body temperature may suggest individual intolerance to perphenazine, in which case discontinue.

If hypotension develops, epinephrine should not be employed, as its action is blocked and partially reversed by perphenazine. Phenothiazines may potentiate the action of central nervous system depressants (opiates, analgesics, antihistamines, barbiturates, alcohol) and atropine. In concurrent therapy with any of these, TRIAVIL should be given in reduced dosage. May also potentiate the action of heat and phosphorous insecticides.

Amitriptyline: In manic-depressive psychosis, depressed patients may experience a shift toward the manic phase if they are treated with an antidepressant. Patients with paranoid symptomatology may have an exaggeration of such symptoms. The tranquilizing effect of TRIAVIL seems to reduce the likelihood of this effect. When amitriptyline HCl is given with anticholinergic agents or sympathomimetic drugs, including epinephrine combined with local anesthetics, close supervision and careful adjustment of dosages are required.

Caution is advised if patients receive large doses of ethchlorvynol concurrently. Transient delirium has been reported in patients who were treated with 1 g of ethchlorvynol and 75-150 mg of amitriptyline HCl.

Amitriptyline HCl may enhance the response to alcohol and the effects of barbiturates and other CNS depressants.

Concurrent administration of amitriptyline HCl and electroshock therapy may increase the hazards associated with such therapy. Such treatment should be limited to patients for whom it is essential. Discontinue several days before elective surgery if possible. Elevation and lowering of blood sugar levels have both been reported.

ADVERSE REACTIONS: Similar to those reported with either constituent alone.

Perphenazine: Side effects may be any of those reported with phenothiazine drugs: extrapyramidal symptoms (opisthotonus, oculogyric crisis, hyperreflexia, dystonia, akathisia, acute dyskinesia, ataxia, parkinsonism) can usually be controlled by the concomitant use of effective antiparkinsonian drugs and/or by reduction in dosage, but sometimes persist after discontinuation of the phenothiazine.

Tardive dyskinesia may appear in some patients on long-term therapy or may occur after drug therapy with phenothiazines and related agents has been discontinued. The risk appears to be greater in elderly patients on high-dose therapy, especially females. Symptoms are persistent and in some patients appear to be irreversible. The syndrome is characterized by rhythmical involuntary movements of the tongue, face, mouth, or jaw (e.g., protrusion of tongue, puffing of cheeks, puckering of mouth, chewing movements). Involuntary movements of the extremities sometimes occur. There is no known treatment for tardive dyskinesia; antiparkinsonism agents usually do not alleviate the symptoms. It is advised that all antipsychotic agents be discontinued if the above symptoms appear. If treatment is reinstituted, or dosage of the particular drug increased, or another drug substituted, the syndrome may be masked. It has been suggested that fine vermicular movements of the tongue may be an early sign of the syndrome, and that the full-blown syndrome may not develop if medication is stopped when lingual vermiculation appears.

Other side effects are skin disorders (photosensitivity, itching, erythema, urticaria, eczema, up to exfoliative dermatitis); other allergic reactions (asthma, laryngeal edema, angioneurotic edema, anaphylactoid reactions); peripheral edema; reversed epinephrine effect; hyperglycemia; endocrine disturbances (lactation, galactorrhea, gynecomastia, disturbances of menstrual cycle); altered cerebrospinal fluid proteins; paradoxical excitement; hypertension, hypotension, tachycardia, and ECG abnormalities (quinidine-like effect); reactivation of psychotic processes; catatonic-like states; autonomic reactions, such as dry mouth or salivation, headache, anorexia, nausea, vomiting, constipation, obstipation, urinary frequency or incontinence, blurred vision, nasal congestion, and a change in pulse rate; hypnotic effects; pigmentary retinopathy; corneal and lenticular pigmentation; occasional lassitude, muscle weakness, mild insomnia. Other adverse reactions reported with various phenothiazine compounds include blood dyscrasias (pancytopenia, thrombocytopenic purpura, leukopenia, agranulocytosis, eosinophilia); liver damage (jaundice, biliary stasis); grand mal convulsions; cerebral edema; polyphagia; photophobia; skin pigmentation; and failure of ejaculation.

Amitriptyline: Note: Listing includes a few reactions not reported for this drug, but which have occurred with other pharmacologically similar tricyclic antidepressant drugs. *Cardiovascular:* Hypotension; hypertension; tachycardia; palpitation; myocardial infarction; arrhythmias; heart block; stroke. *CNS and Neuromuscular:* Confusional states; disturbed concentration; disorientation; delusions; hallucinations; excitement; anxiety; restlessness; insomnia; nightmares; numbness, tingling, and paresthesias of the extremities; peripheral neuropathy; incoordination; ataxia; tremors; seizures; alteration in EEG patterns; extrapyramidal symptoms; tinnitus; syndrome of inappropriate ADH (antidiuretic hormone) secretion. *Anticholinergic:* Dry mouth; blurred vision; disturbance of accommodation; constipation; paralytic ileus; urinary retention; dilatation of urinary tract. *Allergic:* Skin rash; urticaria; photosensitization; edema of face and tongue. *Hematologic:* Bone marrow depression including agranulocytosis; leukopenia; eosinophilia; purpura; thrombocytopenia. *Gastrointestinal:* Nausea; epigastric distress; vomiting; anorexia; stomatitis; peculiar taste; diarrhea; parotid swelling; black tongue. *Endocrine:* Testicular swelling and gynecomastia in the male; breast enlargement and galactorrhea in the female; increased or decreased libido; elevated or lowered blood sugar levels. *Other:* Dizziness; weakness; fatigue; headache; weight gain or loss; increased perspiration; urinary frequency; mydriasis; drowsiness; jaundice; alopecia. *Withdrawal Symptoms:* Abrupt cessation after prolonged administration may produce nausea, headache, and malaise. These are not indicative of addiction.

OVERDOSAGE: All patients suspected of having taken an overdosage should be admitted to a hospital as soon as possible. Treatment is symptomatic and supportive. However, the intravenous administration of 1–3 mg of physostigmine salicylate is reported to reverse the symptoms of tricyclic antidepressant poisoning. Because physostigmine is rapidly metabolized, the dosage of physostigmine should be repeated as required particularly if life-threatening signs such as arrhythmias, convulsions, and deep coma recur or persist after the initial dosage of physostigmine. On this basis, in severe overdosage with perphenazine-amitriptyline combinations, symptomatic treatment of central anticholinergic effects with physostigmine salicylate should be considered.

For more detailed information, consult your MSD Representative or see full Prescribing Information.
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CME CALENDAR

JANUARY

● January 5-8, 1976, University of Miami, "Seminar In Pediatric Nephrology III," Americana Hotel, Bal Harbour, Florida. Category I credit available.

● January 10-11, 1976, "The Medical Association Of The State Of Alabama," Hypertension Conference, Joe Wheeler State Park, Decatur, Alabama, Category I credit - PRA available, Prescribed Credit AAFP available.

● January 11-17, 1976, University of Miami, "Virgin Islands Seminar In Ob-Gyn," Frenchman's Reef, St. Thomas, U.S. Virgin Islands. Category I credit available.

● January 20-23, 1976, University of Miami, "Pathology Symposium: Review And Recent Practical Advances," Deauville Hotel, Miami Beach, Florida. Category I credit available.

● January 22-24, "Current topics in respiratory disease," New York University Medical School. Category I Credit - 17 Hours PRA. Contact: Office of Associate Dean, New York University Medical School, 550 First Avenue, New York, N. Y. 10016.

● January 23, Emory University School of Medicine—Physician Medicine and Rehabilitation, "Skeletal Muscle Spasms Of Local Origin," Georgia Mental Health Institute, Atlanta, Georgia, Category I Credit Available.

● January 30 - February 1, 1976, Southern Radiological Conference, Point Clear.

FEBRUARY

● February 2-6, 1976, University of Miami, "3rd Annual Course In Practical Modern Neurology," Hotel Fountainbleau, Miami Beach, Florida. Category I credit available.

● February 6, "The Geriatric Symposium," VA Hospital, Tuskegee.

● February 9-11, "Basic Mechanisms of Disease," Louisiana State University Medical Center School of Medicine, Shreveport, Louisiana, Category I Credit Available.

● February 9-11, American College of Physicians, "Internists To Study Disease Mechanisms," LSU Medical Center School of Medicine, Shreveport, Louisiana, Category I Credit Available.

● February 15-21, 7th Annual Family Practice Refresher Course, Mills Hyatt House Hotel, Charleston, South Carolina, 40 AAFP Credit Hours Available, Tuition: $150, Deadline for Registration: February 1, 1976.

● February 16-22, 1976, American Thoracic Society, "New Orleans Mardi Gras Supercourse," contact: Ben Fontaine, American Thoracic Society of Louisiana, 333 St. Charles Avenue, New Orleans, La. 70130. PRA and AAFP credit available.

● February 19-21, Emory University School of Medicine—Obstetrics & Gynecology, "Infections In Gynecology-Obstetrics Practice," Pine Isle Hotel, Lake Lanier, Atlanta, Georgia, Category I Credit Available.

● February 22-28, 6th Family Medicine Review, Session III, University of Kentucky Medical Center, Lexington, Kentucky. Registration Fee: $245. For further information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

● February 23-27, 1976, University of Miami, "Basic Neurology For Psychiatrists," Hotel Fontainbleau, Miami Beach, Florida. Category I Credit available.

● February 28-29, 1976, "4th Annual Anesthesiology Review Course," UAB Department Of Anesthesiology, New Basic Science Building, UAB Medical Center, Birmingham. Fee: $75 Contact: Dept. of Anesthesiology, UAB Medical Center, Birmingham, 35294.

● February 29-March 5, 1976, American Society of Contemporary Medicine and Surgery, "Tenth Annual Meeting And Scientific Assembly," Americana Hotel, Bal Harbour, Florida. Category I Credit - PRA available.

MARCH

● March 3-6, Emory University School of Medicine—Urology, "Urology Seminar On Urologic Surgery," Marriott Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● March 6-7, 1976, "Pediatric Genitourinary Radiology," Monteleone Hotel, New Orleans, La. Contact: Wanda Patton, Institute For Pediatric Radiology, 4148 N. Cleveland Ave., Kansas City, Mo. 64117. Category I Credit - PRA available.

● March 31 - April 3, 1976, University of Miami, "Renal Diseases And Hypertension," Americana Hotel, Bal Harbour, Florida. Category I PRA Available.

APRIL

● April 1-3, Emory University School of Medicine—Surgery, "General Surgical Approach To Vascular Disease," Omni International, Atlanta, Georgia, Category I Credit Available.

● April 5-7, Emory University School of Medicine—Pediatrics, "Neonatology For The Pediatrician," Grady Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 5-7, 1976, Medical Group Management Association, "Seminars On Medical Group Systems Development And Facility Design Construction And Financing," Maison Bupuy Hotel, New Orleans, La.

● April 8-10, Emory University School of Medicine—Obstetrics & Gynecology, "Gynecology Oncology and Instruction In Colposcopy," Crawford W. Long Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 8-10, Emory University School of Medicine—Orthopedic Surgery, "Techniques In Orthopedic Surgery," Grady Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 8-10, Emory University School of Medicine—Gastroenterology, "Three Days of Gastroenterology," (Sponsored by the American College of Gastroenterology), Royal Coach Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● April 15-17, 1976, 115th Annual Meeting Of MASA, The Governor's House, Montgomery, Category I Credit.

● April 19-22, Emory University School of Medicine—Cardiovascular, "The Treatment of Heart Disease," Royal Coach Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● April 26-29, 4th Annual Spring Meeting, American College of Surgeons, Sheraton-Boston Hotel and the Statler Hilton Hotel, Boston, Massachusetts.

● April 28-30, Symposium on Gastrointestinal Radiology, Lexington Hilton Inn, Lexington, Kentucky. Registration Fee: $300. For further information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

MAY

● May 14, The First F. Bernard Schultz Cardiovascular Symposium, VA Hospital, Tuskegee, Alabama.

Around The State

Roster Supplement

NEW MEMBERS

JEFFERSON COUNTY

BRIANT, Thomas Paul, b 36, mc Emory 60, recip. Ga. 60, 701 Princeton Ave., SW, Birmingham 35211. Anes.

GEER, Jack Charles, b 27, mc LSU 56, recip. La. 56, UAB-Medical Center, UAB Station, Birmingham 35294. Path.

NEVILLE, Charles Willis, Jr., b 31, mc Vanderbilt 56, recip. Tenn. 56, 6900 6th Ave., South, Birmingham 35212. P.

LAUDERDALE COUNTY

WOMACK, Charles Emerson, b 36, mc Ga. 67, recip. Ga. 68, Courtview Towers, Suite 108, Florence 35630. U.

LEE COUNTY

HAGAN, James David, b 43, mc Ala. 69, recip. NBME 70, Medical Arts Center, 121 North 20th Street, Opelika 36801. I.

MORGAN COUNTY

MARQUES, Paul August, b 41, mc Ga. 72, recip. NBME 73, 1201 Somerville Rd., SE, Decatur 35601. Pd.

NEW TELEPHONE NUMBERS

BEELER, Henry S., Cullman 739-0455
Briant, Thomas P., Jefferson 787-2361
GEER, Jack C., Jefferson 934-4303
HAGAN, James D., Lee 749-8119
JUFSTEDLER, Joe G., Lauderdale 757-4868
MANASCO, Hobson, Winston 486-4242
MARQUES, Paul A., Morgan 350-2711
MOORE, Ben N., Winston 486-4212
NEVILLE, Charles W., Jr., Jefferson 838-2347
WOMACK, Charles E., Lauderdale 766-9764
WOOD, John E., Winston 846-7711

MEMBERS DECEASED

JEFFERSON COUNTY

McDANIEL, Joe Crosby, Birmingham 11/5/75

MEMBERS REINSTATED

CALHOUN COUNTY

TUCKER, Alex Lee, b 25, mc Ala. 59, sb 59, Medical Arts Bldg., Anniston 36201. GP.

LEE COUNTY

HERRING, James Richard, b 36, mc Ala. 61, sb 63, Medical Arts Center, 121 North 20th Street, Opelika 36801. I.

MACON COUNTY

DOWE, Calvin Ray, b 25, mc Meharry 55, sb 56, 108 Reed Ave., Tuskegee Inst., 36088. I.

MEMBERS TRANSFERRED

DeKALB COUNTY

McCRORY, Ellann, 1408 Alabama Avenue, SW, Fort Payne 35967. From Chambers County Medical Society.

ADDRESS CHANGES

COFFEE COUNTY

GRIMES, James T., present Enterprise to P. O. Box 810, Enterprise 36330.

CULLMAN COUNTY

BEELER, Henry S., present Cullman to 1900 Main Ave., SW, Suite 3, Cullman 35055.

ELMORE COUNTY

HUGHES, Andrew J., present Macon, Ga. to 904 Gilmer Ave., Tallassee 36078.

JACKSON COUNTY

BOLTON, Larry T., present Scottsboro to Rt. 5, Box 181-C, Scottsboro 35768.

JEFFERSON COUNTY

BARTHOLD, David R., present Bessemer to P. O. Box 247, Bessemer 35020.

DARNELL, Henry L., present Birmingham to 7901 1st Ave., South, Suite 606, Birmingham 35206.

DEASON, Alpheus M., Jr., present Birmingham to 1000 South 14th Street, Birmingham 35205.

ENSOR, Herman C., present Cullman to 1615 Daisy Street, NW, Cullman 35055.

FITZPATRICK, William O., III, present Fairfield to 3551 Westbury Rd., Birmingham 35223.

GRAY, Gene W., present Birmingham to 713 27th Street, South, Birmingham 35233.

JACKSON, David H., present Bessemer to 2000-E Brookwood Medical Center Drive, Birmingham 35209.

KIM, Robert (Yoon), present Birmingham to 3133 Oberton Road, Birmingham 35233.

KOGUTT, Marvin S., present Birmingham to 3323 Dunbrooke Drive, Birmingham 35243.

MORGAN, Jean M., present Birmingham to 2122 Hickory Road, Birmingham 35216.

REVES, Joseph G., present Birmingham to University Hospital, Dept. of Anesthesiology, UAB-Station, Birmingham 35294.

RUSSINOVICH, Nicholas A. E., present Birmingham to 3547 Westbury Road, Birmingham 35223.

WEIL, Warren B., present Birmingham to 3815 River Oaks Rd., Birmingham 35243.

LAUDERDALE COUNTY

HUFSTEDLER, Joe G., present Florence to Rt. 7, Kendall Gardens, Florence 35630.

MADISON COUNTY
GOLDSTEIN, Richard P., present Huntsville to 3106 Dyas Drive, Huntsville 35801.
KRATZ, Gerald H., present Huntsville to 1400 Cherokee Drive, Huntsville 35801.
MOBILE COUNTY
HENDERSON, Andrew D., present Mobile to 21 S. McGregor, Mobile 36608.
RUMPANOS, Socrates N., present Mobile to P. O. Box 16365, Mobile 36616.
SELLERS, William L., Jr., present Mobile to 1733 Springhill Avenue, Mobile 36604.
MONTGOMERY COUNTY
COOK, Ottis D., present Montgomery to P. O. Box 2000, Wetumpka 36092.
MacQUIRE, Hugh C., present Montgomery to 1110 Mulberry Street, Montgomery 36106.
MONTGOMERY, Hubert T., present Memphis, Tennessee, to 1311 East South Boulevard, Montgomery 36111.
TALLAPOOSA COUNTY
NEWMAN, Lucian, present Dadeville to 113 Ridgeway Drive, Gadsden 35901.
TUSCALOOSA COUNTY
ROSE, Marilyn J. M., present Tuscaloosa to 13 Caplewood Drive, Tuscaloosa 35401.
STRAHAN, Eva E., present Tuscaloosa to 3312 12th Ave., East, Apt. A, South Gate Apts., Tuscaloosa 35401. ■

State Internist Selected For Goldberger Award



DR. BUTTERWORTH

MASA has been notified by AMA officials that Dr. Charles E. Butterworth, Jr., Birmingham internist, has been selected to receive AMA's Goldberger Award. The Award is presented annually to a physician for outstanding contributions in the field of clinical nutrition. Dr. Butterworth was nominated by AMA's Council on Foods and Nutrition and was then approved by the Board of Trustees.

The Goldberger Award consists of a $1,000 check and a commemorative plaque, both of which will be presented to Dr. Butterworth at the AMA's 1976 Annual Convention in June. ■

SPACE AVAILABLE:

Approximately 2,200 Square Feet in the new Sertoma Speech and Hearing Center, 750 Montclair Road in Birmingham. Contact Mr. Ed. Covington--591-7167.

NECROLOGY



William H. Beddow, M.D.
1891-1975

Death claimed Dr. William H. Beddow, life-long Birmingham resident, August 27. He was 84 years of age.

Dr. Beddow was a graduate of the Tulane University School of Medicine and interned at the old Hillman Hospital. He completed his graduated study in France and served in the U. S. Air Corps during World War I.

He was the recipient this year of a citation from Tulane University for his 61 years of medical practice in Birmingham.

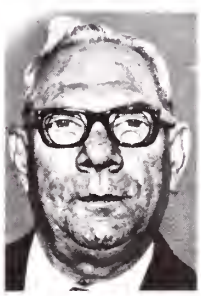
He is survived by two sons, one of which is Dr. C. P. Beddow, of Decatur, and two daughters.

James W. Britton, M.D.
1902-1975

Foley pediatrician, Dr. James W. Britton, died June 30 at the age of 73.

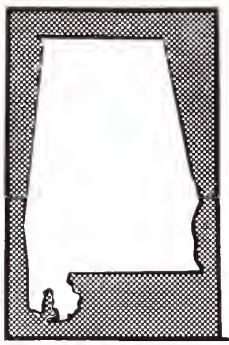
A native of Anniston, Dr. Britton was a graduate of the Emory School of Medicine. He served as a major in the U. S. Army during World War II. He practiced in Foley from 1944 until 1972.

Dr. Britton is survived by his wife, Mrs. Elsa L. Britton.



Charles W. Ramey, M.D.
1913-1975

Dr. Charles W. Ramey passed away recently at the age of 63. He was Bessemer's city physician and former chief of staff at the Bessemer Memorial (now Carraway) Hospital. A graduate of the Medical College of Georgia, Dr. Ramey was a former member of the Jefferson County Board of Education and former president of the Bessemer YMCA and McCalla Civitan Club.



Physician Placement Service In Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

Family Practice: Age 28; Baylor University 1973; National Board; presently in third year FP residency; Available November 1976. LW-1.

Internal Medicine-Pediatrics: Age 28; University of Alabama 1973; National Board; interested in town greater than 10,000 population. Available July 1976. LW-4/2

Internal Medicine: Age 27, Louisiana State University 1974; seeking assistant or associate practice. Available July 1977. LW-4/1

Internal Medicine: Age 33; Georgia 1973; Board eligible; seeking group practice in a college town. Available June 1976. LW-2.

Internal Medicine: Age 32; University trained, board eligible, prefer group practice. Available July 1976. LW-2/2

Internal Medicine-Hematology, Oncology: Age 31; Vanderbilt 1970; Board certified; National Board; seeking associate practice. Available July 1976. LW-2/1

Ophthalmology: Age 28, Tulane University 1971; Board eligible; seeking solo, associate or group practice. Available July 7, 1976. LW-10/2

Ophthalmology: Age 28; Emory University 1973; seeking solo, associate or group practice. Available July 1977. LW-10/3.

Orthopedics: Age 29; State University of New York at Buffalo 1972; Board eligible; seeking associate practice. Available July 1976. LW-11/1

Pediatrics: Age 27; University of Alabama 1973; seeking group practice. Available July 1976. LW-7/1

Pediatrics: Age 31; University of Alabama 1970; National Board; Board eligible; seeking associate or group practice. Available August 1976. LW-7

Pediatrics: Age 28, Temple University 1973; National Board; seeking group practice. Available September 1976. LW-3.

Surgery: Age 30; University of Florida 1972; Board eligible; seeking solo or associate practice; Available July 1977. LW-8/3

Surgery: Age 30; University of Florida 1972; presently in third year gen. surgery residency; Board eligible 1977; seeking group or associate practice, or sole or multispecialty arrangement. Available July 1977. LW-8/1

Surgery: Age 31; LSU 1969; completing tour of active duty; seeking associate practice. Available September 1976. LW-8/2

PHYSICIANS WANTED

(Opportunities For Practice)

Emergency Physician $60,000 for 45 Hr. week; paid insurance, convention; modern 300-bed general hospital.

Physicians wanted **(General Internal Medicine, Gastroenterologist, Dermatologist)** Trade area, 400,000 population. Population of town: 45,000, located in Northeast Alabama. Small town advantages with big city conveniences within hour's drive. Ground floor professional opportunity to join a group of internists in the development of programs in General Internal Medicine, medical specialties, and other disciplines appropriate for the establishment of a regional multispecialty health clinic. Financial arrangements negotiable. No investment necessary. Opportunity for partnership in two years. PW-8

A community with combined population of 10,000 located near Mobile, Alabama is seeking a **general practitioner.** Office space available with living quarters. Several churches and schools. PW-9

General Practitioner opportunity in central Alabama town of 4500 population. Within 17 miles north of Montgomery, Alabama. The finest recreational areas in Alabama consisting of 2 large lakes. Newly expanded 69 bed hospital with 8 active staff members. Invitation to visit with expenses paid will be directed to those qualified. PW-4

Group practice opportunity for **General Surgeon.** Seven member clinic seeks a partner to practice general surgery. Community of 10,000+, near Tennessee River, 2 hours from the University Medical Center. New 100 bed J.C.A.H. approved hospital. Free inspection trip, relocation expenses, guaranteed income. PW-5.

General Practitioner's 2 family physicians wanted for general practice in a 64-bed hospital, located between 2 North Alabama towns (in the heart of the Tennessee Valley) with a trade population of 18,000. Office space available. Within 35 miles of large city. Large amount of industrial work in our area. PW-7

Internists, FP's, Ob-Gyn successful practice assured - 300-bed modern hospital, University affiliated, new connecting office building. All urban advantages for your family - Staff retirements leave immediate patient load - Assistance including 6 months free rent. Guaranteed minimum for right individual. PW-6

Internist wanted in central Alabama town with population of 4500 near large city. Newly expanded 69 bed hospital with new 6 bed intensive care unit. 8 member medical staff. Located within 15 minutes of 2 of Alabama's finest lakes. Invitation to visit with expenses paid will be directed to those qualified. PW-2

Pediatrician wanted in central Alabama town with population of 4500 near large city. Newly expanded 69 bed hospital with an active 8 member staff. Invitation to visit with expenses paid will be directed to those qualified. PW-3

Maybe the patient's self-diagnosis is right. He could have hay fever. But that bright red nasal mucosa, along with the thick discharge and excoriation around the nares, strongly suggests that the main problem is a cold. Hay fever or another form of allergic rhinitis may or may not be an underlying factor.

If a complete history and examination rule out allergic rhinitis, the long-term outlook will be a lot more favorable than his own "diagnosis" would have indicated.

But right now, whether he's got allergic rhinitis or a cold, he's suffering from the same irritating symptoms of drip, congestion and stuffiness. Try DIMETAPP EXTENTABS®. They're formulated to relieve these symptoms without much chance of causing drowsiness or overstimulation. Your patients will appreciate the 24-hour relief they can get from just one tablet every 12 hours.

Cold or



Allergy?

Whether it's a cold or an allergy, Dimetapp Extentabs® relieve stuffiness, drip and congestion.*

*INDICATIONS

Based on a review of this drug by the National Academy of Sciences — National Research Council and/or other information, FDA has classified the following indications as lacking substantial evidence of effectiveness as a fixed combination. Dimetapp Extentabs are indicated for symptomatic relief of allergic manifestations of upper respiratory illnesses such as the common cold, seasonal allergies, sinusitis, rhinitis, conjunctivitis and otitis. In these cases it quickly reduces inflammatory edema, nasal congestion and excessive upper respiratory secretions, thereby affording relief from nasal stuffiness and postnasal drip.

CONTRAINDICATIONS: Hypersensitivity to antihistamines of the same chemical class. Dimetapp Extentabs are contraindicated during pregnancy and in children under 12 years of age. Because of its drying and thickening effect on the lower respiratory secretions, Dimetapp is not recommended in the treatment of bronchial asthma. Also, Dimetapp Extentabs are contraindicated in concurrent MAO inhibitor therapy.

WARNINGS: *Use in children:* In infants and children particularly, antihistamines in overdosage may produce convulsions and death.

PRECAUTIONS: Administer with care to patients with cardiac or peripheral vascular disease or hypertension. Until the patient's response has been determined he should be cautioned against engaging in operations requiring alertness such as driving an automobile, operating machinery, etc. Patients receiving antihista-

Dimetapp Extentabs®

Dimetane® (brompheniramine maleate), 12 mg.; phenylephrine HCl, 15 mg.; phenylpropanolamine HCl, 15 mg.

...mine should be used with caution. Possible additive effects with CNS depressants such as alcohol, hypnotics, sedatives, tranquilizers, etc.

ADVERSE REACTIONS: Adverse reactions to Dimetapp Extentabs may include hypersensitivity reactions such as rash, urticaria, leukopenia, agranulocytosis, and thrombocytopenia; drowsiness, lassitude, dizziness, dryness of the mucous membranes, tightness of the chest, thickening of bronchial secretions, urinary frequency and dysuria, palpitation, hypotension, hypertension, headache, faintness, dizziness, tinnitus, incoordination, visual disturbances, mydriasis. CNS depressant and (less often) stimulant effects, anorexia, nausea, vomiting, diarrhea, constipation, and epigastric distress.

HOW SUPPLIED: Light blue Extentabs in bottles of 100 and 500.

A·H·ROBINS

A. H. Robins Company, Richmond, Va. 23220

when pain goes on... and on... and on–



For the patient with a terminal illness, PAIN past, present, and future can dominate his thoughts until it becomes almost an obsession. The more he is aware of the pain he is now experiencing, the more difficult it is to erase his memory of yesterday's pain, and to allay his fearful anticipation of tomorrow's pain.

Surely the last thing this patient needs is an analgesic containing caffeine to stimulate the senses and heighten pain awareness. A far more logical choice is Phenaphen with Codeine. The sensible formula provides ¼ grain of phenobarbital to take the nervous "edge" off, so the rest of the formula can help control the pain more effectively. Don't you agree, Doctor, that psychic distress is an important factor in most of your terminal and long-term convalescent patients?

the analgesic formula that calms instead of caffeinates

Phenaphen® with Codeine

Phenaphen with Codeine No. 2, 3, or 4 contains: Phenobarbital (¼ gr.), 16.2 mg. (warning: may be habit forming); Aspirin (2½ gr.), 162.0 mg.; Phenacetin (3 gr.), 194.0 mg.; Codeine phosphate, ¼ gr. (No. 2), ½ gr. (No. 3) or 1 gr. (No. 4) (warning: may be habit forming).

Indications: Provides relief in severer grades of pain, on low codeine dosage, with minimal possibility of side effects. Its use frequently makes unnecessary the use of addicting narcotics. **Contraindications:** Hypersensitivity to any of the components. **Precautions:** As with all phenacetin-containing products, excessive or prolonged use should be avoided. **Side effects:** Side effects are uncommon, although nausea, constipation and drowsiness may occur. **Dosage:** Phenaphen No. 2 and No. 3—1 or 2 capsules every 3 to 4 hours as needed; Phenaphen No. 4—1 capsule every 3 to 4 hours as needed. For further details see product literature.

(III) Phenaphen with Codeine is now classified in Schedule III, Controlled Substances Act of 1970. Available on written or oral prescription and may be refilled 5 times within 6 months, unless restricted by state law.

A. H. Robins Company, Richmond, Va. A·H·ROBINS

Public Relations Seminar

Attracting a record 150 medical assistants, the Jefferson County Medical Society sponsored a Public Relations Seminar for Medical Assistants on October 29-30, 1975, in Birmingham.

Considered by many to be the first of several to be held throughout the State, the two-day seminar featured a session entitled, "You, The Telephone Manager." Moderated by Karen Zupko, AMA, the session involved telephone techniques and office management using role-playing case studies and visual aids to help the assistant handle the disgrunted patient, the patient who demands to see the doctor immediately and numerous other patient-related problems.

Other program personalities included Dr. Herbert N. Carmichael and Dr. Samule K. Cohn, members of the Jefferson County Medical Society Mediation and Medical Ethics Committee, who talked about the practice of medical ethics in the physician's office. ■



Dr. Lee Beck, left, and Harry Vaughn, research assistant in reproductive biology at UAB prepare a baboon for surgery. The baboons are being used to find better methods of birth control.

Birth Control Answers Sought In Primate Studies

The solutions to overpopulation may be found through research with the baboon, according to Dr. Lee Beck, Assistant Professor of Obstetrics and Gynecology, UAB School of Medicine. Dr. Beck has been using a primate colony consisting of baboons to find better methods of birth control because the reproductive functions and organs of a female baboon are very similar to those of the female human.

One of the experiments with the primate colony includes the transplanting of an ovary in the uterus, thereby bypassing the fallopian tubes. Another involves work on an injectable contraceptive.

Dr. Beck said that the ovary transplant would determine if the fallopian tubes are necessary for the development of the egg and birth of the child; in other words, whether or not a contraceptive which interfers with passage of the egg through the oviduct would be effective. ■

Auxiliary



Mrs. William D. Hughes
President

Research and Romance

In this bicentennial year, a great deal of emphasis has been placed on our heritage. One heritage that is most important to us is that of medicine. Many are familiar with the pioneers such as Lister, Long and others. How many of us know that the background of medicine in our county?

The medical auxiliary of Pike County has just published their history. Not only is it informative, but some instances are amusing, too. In 1864, the following notice was published in the local paper: "Dr. Ben Hill is now recovered his health and is ready to resume practice. He will endeavor to confine his charges to old prices, fifty cents per mile during the day and one dollar at night, one dollar and fifty cents for medicine and prescriptions to be paid in any article of produce at old prices. If not paid in produce, he will confine himself to the fee bill prices established by the Physicians of Troy."

Another excerpt: "Dr. Kelly informs the public that he has just received a fresh supply of Medicines, which he proffers to practice out for cash, and CASH only. We have to pay cash for everything that pertains to the practice of our profession, hence the necessity of our adopting the cash system." So you see that finances have always been a necessary evil in practicing medicine.

If your county does not have history of medicine, appoint someone to get this project started. Your ladies will be glad to assist you, as well as courthouse personnel, librarians and cemetary caretakers.

Each year at the ladies meetings of the Southern Medical Association, there are prizes awarded for the entries in the Research and Romance of Medicine. At our annual convention in April, to be held in Montgomery, there will be a display area for those wishing to share their exhibit.

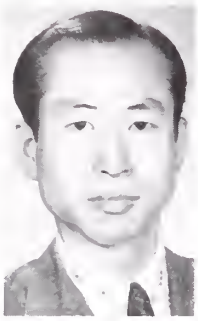
Get the ball rolling in your county, and next year Alabama will have more than one entry in this category!!

Pres.-Elect—Mrs. George Scofield/**1st Vice-Pres.**—Mrs. Lewis Young/**NW District Vice-Pres.**—Mrs. Aubrey Terry/**NE District Vice-Pres,**—Mrs. Eugene Bradley/**SE District Vice-Pres.**—Mrs. Emil Wright/**SW District Vice-Pres.**—Mrs. Charles Weaver. ■

New Physicians Licensed To Practice In Alabama



Hickman, James Richard, Jr., M.D., Medical College of Virginia, 1968. Reciprocity with Virginia. Specialty: Internal Medicine.



Ahn, **Jung Hong,** M.D., Kyungpook University School of Medicine (Korea), 1966. Reciprocity with Georgia (FLEX). Specialty: Anesthesiology.



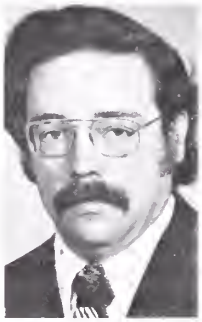
Gould, John Samuel, M.D., University of Vermont College of Medicine, 1964. Reciprocity with National Board of Medical Examiners. Specialty: General and Orthopedic Surgery.



Holland, William Russell, M.D., Medical College of Georgia, 1971. Reciprocity with Georgia.



Blank, Roy Crary, M.D., University of Maryland School of Medicine, 1972. Reciprocity with National Board of Medical Examiners.



Gray, **Paul Wesley, Jr., M.D.,** University of Alabama School of Medicine, 1971. Reciprocity with National Board of Medical Examiners.



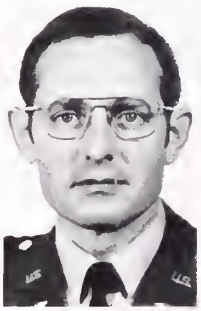
Howell, William Harper, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Carden, **Bradley Lamar, M.D.,** University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Gygi, **Andrew Charles, Jr., M.D.,** University of North Carolina School of Medicine, 1970. Reciprocity with North Carolina. Specialty: Orthopedic Surgery.



Humbert, Paul Vivian, M.D., University of Illinois College of Medicine, 1963. Reciprocity with National Board of Medical Examiners. Specialty: Aerospace Medicine.



Fagan, Philip John, Jr., M.D., Tulane University School of Medicine, 1969. Reciprocity with Louisiana.



Haggstrom, Gerard Donald, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



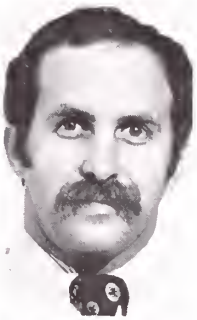
Johnson, Michael Lynn, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Jones, Clyde Michael, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Meshad, Michael Wallace, M.D., University of Alabama School of Medicine, 1972. Reciprocity with National Board of Medical Examiners.



Samuelson, Paul Nathan, M.D., University of Rochester School of Medicine, 1968. Reciprocity with National Board of Medical Examiners.



Kelly, David Reid, M.D.., University of Tennessee College of Medicine, 1974. Reciprocity with Tennessee (FLEX).



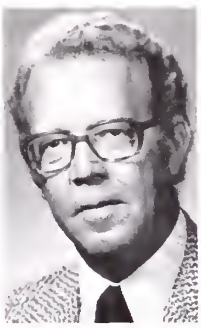
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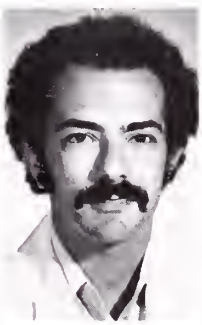
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AAFP President Herbert Holden (r) presents the Thomas W. Johnson Award to Dr. Stephens for his outstanding contributions to Family Practice.

Dr. Stephens Receives Highest AAFP Award

Dr. G. Gayle Stephens, Dean, School of Primary Medical Care, UAH, was awarded the Thomas W. Johnson Award by the American Academy of Family Physicians (AAFP) at its 1975 Annual Meeting in Chicago.

Established in 1973, the Award is designed to recognize persons who have made outstanding contributions to Family Practice Education. Dr. Stephens was an early architect of the Family Practice Residency Program at Wesley Medical Center in Wichita, Kansas, before his appointment as dean and department chairman at the School of Primary Medical Care.

Nominations for the Award are made by Academy members, state chapters, and the academic community. Final decisions are made by the AAFP Board of Directors.

Children's Care Program Created By Pediatricians





Among Alabama pediatricians in attendance were (l to r): Drs. T. C. Nolan, Montgomery; Dewey A. White, Jr., Birmingham; Joseph M. Humphries, Birmingham; Daniel F. Sullivan, Mobile; and William A. Walker, Decatur.

A Children's Advocacy Committee has been formed by Alabama pediatricians to implement a Children's Medical Services program through the State.

During a regional business meeting of the Alabama Chapter, American Academy of Pediatrics, conferees elected the following members to this new Committee:

Drs. Herschel P. Bentley, Jr., Daniel F. Sullivan and Hollis J. Wiseman, of Mobile; Drs. C. E. Robert Parker and Thomas C. Nolan, of Montgomery; Drs. John W. Benton, Jr., William A. Daniel, Jr., and Dewey A. White, Jr., of Birmingham; Dr. Gerald G. Woodruff, Jr., of Anniston; Dr. Richard L. Lester, Jr., of Huntsville; and Dr. Charles Kermit Pitt, of Decatur.

The Committee will be the focal point through which a new emphasis in the funding of medical and health programs for indigent children will be created. In addition to medical treatment, the program will include provisions for educating children with learning disabilities. ■

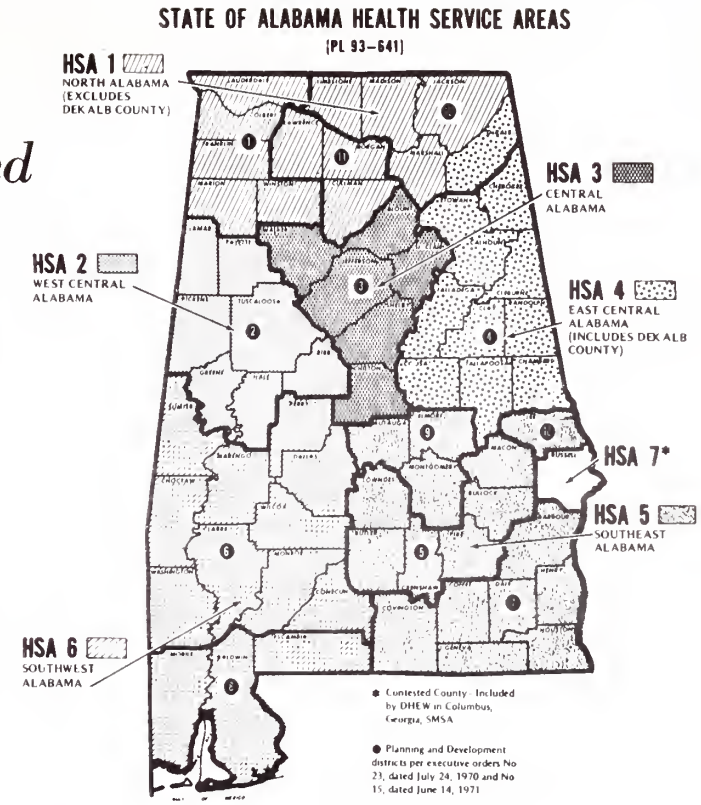
ISA Designations Ratified: Physician Participation Urged

As has been reported in the *Alabama MD* and the *Journal Of The Medical Association Of The State Of Alabama*, the Health Service Areas which were recommended under the auspices of P. L. 93-641 have been ratified by the Secretary of Health, Education and Welfare, and those Health Service Areas for the State of Alabama have been officially designated. (See map).

There are six such areas, each to be serviced by a Health Systems Agency which will have the responsibility for all health planning in the area. In addition to planning, these Agencies will decide on the expenditure of all Federal health funds in each area.

The Health Systems Agency's governing bodies will compose the majority of the State-wide Health Coordinating Council, (SHCC), which will have the responsibility for approving Agency actions and provide direction to the State Health Planning and Development Agency. This Council will be appointed by the Governor and will be composed of a majority of health "consumers."

The Medical Association's Board of Censors has in the past and is again urging that physicians take part in the development of the Health Systems Agency in their particular Health Service Area. It is only through active involvement at the local level that physicians will be heard and the physician point of view be included and considered on the State and local governing bodies. ■



Censors Examine Insurance Future

Confronted with the request of Employers Insurance of Wausau that they be relieved of their five-year commitment as of July 31, 1976, the State Board of Censors reviewed a proposed package of 14 options and came up with a consolidated program to include three avenues of approach. These avenues are as follows:

(1) To contact a nationally rated brokerage firm to canvas the insurance market for the possibility of finding a carrier for the MASA program.

(2) **To approach** other carriers with the possibility that one will assume the MASA program under its existing terms and conditions. (Wausau officials have termed the program "one of the most successful in the country.")

(3) Self-insurance (MASA-owned or organized on a regional basis with states having compatible situations).

Along with several MASA staff members, the Board sandwiched in a meeting between their regularly scheduled November meetings to deliberate over the future of the MASA professional liability insurance program. Before examining the 14 options, the conferees were in agreement that their decisions must be made with the best interests of MASA members in mind and that no ultimate decision be entered into hurriedly. ■

IMMEDIATE OPENING

FOR GENERAL SURGEON in 206 bed general medical and surgical VA Hospital, Montgomery, Ala. U. S. Licensure (any state) required. Must be Board certified eligible. New Intensive Care Unit. Good medical library. Excellent fringe and retirement benefits including malpractice coverage. Will pay travel and moving expenses. New pay supplement now available. EEO Employer. Contact: Chief of Staff, VA Hospital, 215 Perry Hill Road, Montgomery, AL. 36109, Telephone Number (205) 272-4670.

IMMEDIATE OPENING

FOR GENERAL PRACTITIONER AT VA HOSPITAL, Montgomery, Ala. and similar position in satellite clinic, Mobile, Ala. Excellent fringe and retirement benefits including malpractice coverage. Good medical library. U. S. Licensure (any state) required. Will pay travel and moving expenses. New Pay supplement now available. EEO employer. Contact: Chief of Staff, VA Hospital, 215 Perry Hill Road, Montgomery, AL. 36109 Telephone Number (205) 272-4670.

IMMEDIATE OPENING

FOR INTERNIST IN 206 bed general medical and surgical VA Hospital, Montgomery, AL. Excellent fringe and retirement benefits including malpractice coverage. Good medical library. U. S. Licensure (any state) required. Must be Board certified eligible. New ICU, RCU and pulmonary function. Will pay travel and moving expenses. New pay supplement now available. EEO employer. Contact: Chief of Staff, VA Hospital, 215 Perry Hill Road, Montgomery, AL. 36109, Telephone Number (205) 272-4670.

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The risk of dehydration . . . plus the psychologi
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greatly increases the urgency in controlling vo
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pyrilamine maleate 25 mg; sodium pentobarbital 30 mg
Warning: may be habit forming

*Based on usage by dosage form; data gathered by independent research organization.

SCRIPTION: WANS® Children: (Blue) pyrilamine maleate mg and pentobarbital sodium* ½ gr (30 mg) scored for dosage. WANS® No. 1: (Pink) pyrilamine maleate 50 mg d pentobarbital sodium* ¾ gr (50 mg) scored for ½ dosage. ANS® No. 2: (Yellow) pyrilamine maleate 50 mg and ntobarbital sodium* 1½ gr (100 mg) scored for ½ dosage.

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NTRAINDICATIONS: Infants under 6 months. Acute ermittent porphyria, known hypersensitivity to barbiturates antihistamines, known previous barbiturate addiction, ere hepatic impairment, CNS injury, senility, and presence uncontrolled pain.

ARNINGS: Barbiturates may be habit forming. Pre-existing ychologic disturbances may be aggravated. Idiosyncratic ctions may occur. Acquired sensitivity may result in allergic ctions. Safety in pregnancy has not been established.

ECAUTIONS: Use cautiously with other sedative, hypnotic narcotic agents. Use with caution in patients with acute or onic hepatic disease, fever, hyperthyroidism, diabetes llitus, severe anemia, congestive heart failure, or a history drug dependence or suicidal tendencies. May impair rtness and coordination with increased accident risk.

ADVERSE REACTIONS: Drowsiness, fatigue, vertigo, incoordination, tremor, muscle weakness, ataxia, hypotension, respiratory depression, delirium and coma. Dryness of nose, mouth, and throat, pupillary dilatation or blurred vision, urinary retention, abdominal pain, nausea, vomiting, diarrhea, and hypersensitivity reactions. Overdose may result in hallucinations, excitement, ataxia, incoordination, athetosis, convulsions, and death.

DOSAGE AND ADMINISTRATION: Rectally, children 2-12 years of age, one WANS® CHILDREN every 6-8 hours as required. Children under 2 years of age may receive ½ the above dosage. *Adults:* Rectally, one WANS® No.1 Supprette™ to inhibit mild nausea and/or vomiting; one WANS® No. 2 Supprette to control pernicious vomiting. Repeat doses for adults should be 4 to 6 hours apart, not to exceed four doses in 24 hours. Moisten finger and Supprette with water before inserting. Optimum dosage must be determined in each case by the clinical response.

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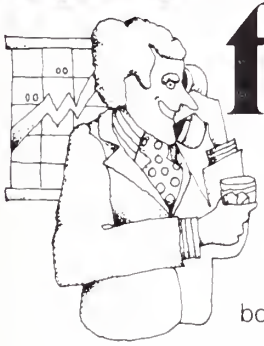
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Digest of Actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the December 17 meeting of the State Board of Censors:

- Approved Financial Statement for the period ending November 30, 1975, which shows receipts of $398,687.99 and disbursements of $189,262.23.
- Authorized Mr. Larry D. Dixon and the chairman of the Council on Medical Education or a designated member of that Council to attend the 72nd Annual AMA Congress on Medical Education, January 30 - February 1, 1976 in Chicago.
- Authorized Mr. Richard C. Whitaker and one member of the Board of Censors to attend the Associated Industries of Alabama's Annual Washington Meeting, February 1-2, 1976.
- Apportioned seven counsellorship vacancies as follows: Third District - one Counsellor; Fifth District - two Counsellors; Sixth District - one Counsellor; and, Seventh District - three Counsellors.
- Tabled for one month the matter of Surgeons assistants' fees and requested Mr. Patterson investigate the matter by obtaining an answer from Blue Cross-Blue Shield, Medicare -Medicaid and the AMA Legal Department.
- Received progress report on up-coming Hypertension Conference to be held January 10-11, 1976, at Joe Wheeler State Park, Rogersville, Ala.
- Approved co-sponsorship with the Alabama Hospital Association and the Joint Commission on Accreditation of Hospitals for the Quality Review Center's Hospital and Medical Staff Law and Bylaws Conference.
- Appointed ad-hoc committee, to be headed by the chairman of the Board of Censors and one or two designated members of the Board, to serve in conjunction with the State of Alabama Legislative Council's recently-appointed subcommittee on malpractice insurance.
- Deferred action on Peer Review nominations until January meeting and voted that in subsequent years all nominations be in by September 1, in order for each District Censor can review the nominations.
- Approved the Constitution for the Medical Society of Mobile County.
- Received for further study the Operating Policies for MASA personnel.
- Received for consideration presentations by Mr. James L. Goyer, Jr., Executive Vice President, Collier Cobb and Associates of Alabama, Inc , and Mr. Joe Smetana and Archiball Williams of Risk Management, Inc. regarding malpractice insurance.

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CHILD MENTAL HEALTH UNIT OPENS IN ATLANTA



The first private, comprehensive in-patient psychiatric service for children in Georgia has opened at Peachtree and Parkwood Mental Health Center and Hospitals in Atlanta, Georgia. Out-patient services and a day-care program are an integral part of this new service for children under 13 years of age.

TREATMENT PLAN

A multi-modality approach to psychiatric treatment is used and a comprehensive treatment plan is developed for each child. Psychiatric history, physical and neurological examinations, social history, educational evaluation and psychological testing determine the basic data upon which a treatment plan is devised.

The following types of treatment are used: individual psychotherapy (play therapy); group activities and group therapy; chemotherapy; parents and family therapy, and occupational, recreational, and music therapies. Special emphasis is placed on the family therapy process and treatment involves the family at every step

MEDICAL SERVICES

Each child admitted receives a complete physical and neurological examination performed by the Center's pediatrician. This includes a medical history and necessary laboratory procedures, such as EEG, EKG, and fluoroscopic X-ray studies.

STAFF

The new Child Service is directed by a fully-trained child psychiatrist who has had previous experience with the direction of a child unit. Ten child psychiatrists and several child psychologists are involved in the program, and the staff works as a team in diagnosis, treatment and rehabilitation under the direction of a child psychiatrist.

NEEDED SCHOOLING AVAILABLE

An educational evaluation determines the prescriptive teaching each child requires in the special educational program which is provided.

Peachtree and Parkwood is a comprehensive mental health center which includes alcohol rehabilitation and drug treatment as well as psychiatric treatment for adults, adolescents and children. Complete information on services and facilities may be obtained by writing or calling the Admissions Director:

PEACHTREE and PARKWOOD MENTAL HEALTH CENTER and HOSPITALS

1999 Cliff Valley Way, N.E. Atlanta, Georgia 30329 404/633-8431

Accredited by the Joint Commission on Accreditation of Hospitals

ALABAMA DEPARTMENT OF PUBLIC HEALTH:

Bureau of Preventable Diseases

FREDERICK S. WOLF, M.D., DIRECTOR

TYPHOID

Today this is a relatively rare infectious disease. Patients may appear in your practice requiring a differential diagnosis of the several symptoms resulting from the successful invasion of your patient by one of the salmonella.

An example of the disease occurred recently in an 11-year-old child. There was a history of drinking water from a small stream followed by diarrhea and intestinal discomfort with elevated temperature. About three weeks later, the child presented to the pediatrician with a temperature approaching 106 degrees F. and signs of an acute abdomen.

What localizing signs were present pointed toward the right upper quadrant. The surgeon found a perforated gall bladder. The pathologist found the gall bladder wall gangrenous. S. typhi was grown from the operating room specimen. The child is progressing well.

In Osler's review of 1,500 cases of typhoid, acute gall bladder infection occurred 16 times. Perforation is mentioned, but no incidence is recorded in the 9th Edition of Osler and McCrae's textbook.*

Other children are reported to have consumed stream water at the same time as the patient cited. Of these, three have reported vague abdominal discomfort and diarrhea severe enough to prevent school attendance in two instances. Stool specimens from these children are in the State Laboratory. One of the symptomatic children obtained prompt relief on treatment with ampicillin.

All of us are aware of the asymptomatic carrier following recovery from typhoid fever. There is also a significant number of acutely infected individuals who do not develop the classical symptoms of typhoid fever. A group of individuals with positive stool cultures and no symptoms was found, studied, and reported to Alabama physicians in the *Alabama MD* for September 7, 1972.

TUBERCULOSIS

The reporting of 738 new active cases for the year 1975 through November 30th should arouse the interest of all Alabama physicians. This is a treatable disease. With the available anti-mycrobial drugs, a high cure rate is possible provided the physician motivates the patient to two years of daily therapy.

Every proven case of active tuberculosis should be treated with a regimen of not less than two drugs and preferably on three drugs. In the State clinics, patients are recommended isoniazid, ethambutal daily, and streptomycin for at least a series of thirty grams. The basic two drugs are continued for a full two years. Hospitalization is rarely required.

The State Tuberculosis Control Program will provide the basic drugs for therapy without charge. Induced sputum for culture and other public health measures are provided.

ODDS AND ENDS

Scrub Typhus, Tsutsugamushi Disease, Richettsial Disease of one type or another are world-wide in distribution. The disease is transmitted by chiggers and mites from a reservoir of small warm-blooded animals. Incubation periods range from one to three weeks for typhus, trench fever, and scrub typhus and three to seven days for Rocky Mountain spotted fever. Chills, high fever, severe headaches, general malaise, and myalgia may be present. Small crusted scabs are frequently present. Therapy with tetracycline or chloramphenicol is effective. Late in the disease, serological findings may be positive to confirm the diagnosis.

More and more evidence accumulates that the most important factor in the control of diabetes is control of the circulating glucose. For ketoacidosis there is evidence that the use of regular insulin intravenously at the rate of six units per hour is most effective. Restoration of fluid, correction of altered acid-base balance, and electrolyte abnormalities all are an essential part of the therapy.

From California comes the story of a 34-year-old man who washed apricot kernels, mixed them with milk and honey in a milkshake, and then drank the mixture. About 48 kernels were consumed. Approximately an hour later forceful vomiting, headache, flushing, heavy perspiration, dizziness, and faintness.

Apricot kernels, cherry and peach pits, as well as other pits and seeds contain a cyanogenic glycoside called amygdalin. The dose required to cause death is unknown.

GONORRHEA — October, 1975

Total Female Specimens	21,300
Positive Cultures	1,067
Positive	5.0%
Submitted from Private Practice	12,442
Positive Cultures	310
Positive	2.5%

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*Osler and McCrae, The Principles and Practice of Medicine, 9th Ed., 1920, p. 42.

Digest of Actions of the State Committee of Public Health

The State Committee of Public Health at its regular meeting on December 17, 1975 took the following actions:

- Approved a Registrar and 3 Deputy Registrars for Vital Statistics.
- Confirmed the election of Dr. Harold C. Woodworth as Health Officer for District I Health Department, including Colbert, Franklin and Lauderdale Counties effective December 10, 1975.
- Approved authorization of a Coosa County Occupancy Law as a joint action with the physician and County Board of Commissioners in the absence of a County Board of Health.
- Received report on Comprehensive Health Planning regarding the Data Management System and the processing of the six applications for Health Systems Agencies, which have been transmitted to the Governor's Office for his recommendation to DHEW.
- Approved Laboratory Proficiency Testing Program of the American Society of Internal Medicine entitled Medical Laboratory Evaluation (MLE).
- Approved recommendation of the Rabies Advisory Committee establishing vaccination fee for public clinics in 1976 at $3.00 per vaccination and observed that this applies not only to dogs, but to cats and exotic pets.
- Approved the following, contingent upon approval by the Regional Planning Agencies: a. Cahaba Region Mental Health/Mental Retardation Center, Selma (Hill-Burton Grant of $262,611) b. United Cerebral Palsy of Gadsden (DDSA Grant of $24,000) c. Camp ASCCA, Tallapoosa County (DDSA Grant of $18,300) d. Rotary Rehabilitation Center, Mobile (Hill-Burton Grant of $52,800 for renovation to meet the Life Safety Code)
- Approved application for Indian Creek Home for the Aged, Huntsville, for 55 additional nursing home beds.
- Denied application of the North Alabama Home Health Agency, Huntsville.
- Approved Jackson Hospital, Montgomery, request for an EMI scanner under a lease/purchase agreement.
- Approved Computerized Axial Tomography unit for Providence Hospital, Mobile, of the total body type.
- Reversed decision of the November meeting denying a Computerized Axial Tomography for Doctors Hospital, Mobile, and approved that request.
- Approved Medical Plan Amendment limiting extensions for hospital care in excess of the basic 20 days per calendar year to 10 days.
- Approved a Plan Amendment requiring the use of Medicare Part A co-insurance for patients in skilled nursing facilities before Medicaid assumes these patients for care.
- Approved request to the Optometric Association to delete the payment for eyeglasses for persons 21 years of age and older.
- Approved a Plan Amendment for the provision of tuberculosis care setting the limits for this disease the same as for hospitalization for other causes.
- Approved a Plan Amendment deleting the payment for in-patient psychiatric hospital services for individuals under age 22.
- Approved a Medicaid Plan Amendment eliminating the retroactive adjustment for payments for family planning.
- Reaffirmed its policy for providing for a ceiling on nursing facility rates to a $21.50 level.
- Welcomed Dr. Alfred R. Stumpe as a new physician in the Bureau of Preventable Diseases. ■

Adolescent Care Unit

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A private, in-patient intensive psychiatric treatment unit for a wide range of nervous, emotional, mental and personality disorders. Accredited and Licensed. Academic programs maintained by Educational Psychologist. The Adolescent Care Unit is situated in a General hospital less than two miles from the Jackson Municipal Airport.

C. Mims Edwards, M.D., Attending Psychiatrist
Barbara Goff, M.D., Consulting Psychiatrist

DOCTOR LUKE (CONTINUED FROM PAGE 18)

his first-hand sources of information enhance the composition of both the Books of Luke and Acts. Luke may be best known by religious scholars for his medical attention to and association with the Apostle Paul. However, it is to modern man's benefit and with a deeper sense of meaning that Luke has accurately recorded, through medically sharpened eyes, the period around Christ's birth.

Special appreciation goes to Dr. Robert Causey, Marietta, Georgia, pediatrician, for his contribution and interpretation of medical facts which appear in the Gospel of St. Luke.

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1. Commentary on Luke by Ray Summers, Word Incorporated, Waco, Texas, pp. 7-13.
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DEAN'S REPORT:

The Practicing Physician and The Clinical Teacher



William R. Willard, M.D., Dean
College of Community Health Sciences
University of Alabama

Clinical teaching was done in most medical schools by practicing physicians prior to World War II. The Johns Hopkins Medical School started the trend toward full-time teachers before the turn of the century, and the full-time system was installed by several other schools which were favored with large endowments such as Yale and Chicago during the first half of the century. This trend was facilitated by the Flexner Report, which accelerated the movement to place medical schools under university auspices.

Following World War II with the beginning of massive research support from the Federal government, voluntary health agencies and foundations, the full-time system developed rapidly in all medical schools. With research funds, the schools developed large full-time faculties and with research came specialty and subspecialty training. These faculties needed hospital beds for their work, and the university hospitals became largely tertiary care centers with the specialty skills and technology available there.

The result was that the practicing physician was largely eliminated from a significant role in the teaching of medical schools, and the staffs at university-controlled teaching hospitals were largely members of full-time faculties. Although most schools carried the names of many practicing physicians on their voluntary faculty, only a few contributed significantly to teaching or had privileges in university-controlled hospitals which they could and did use.

Thus, the pendulum had swung from one extreme at the beginning of this century, that of clinical teaching by practicing physicians, to the other extreme, that of virtually all clinical teaching by full-time faculty.

There were weaknesses in both extremes. The practicing physicians usually could not give the time that is required for good academic planning and teaching if students were to have a superior program. Many have not been able to keep up with the latest in scientific advances and feel insecure when faced by students and residents who know more about science that they do but less about patient care.

Many have not been accustomed to and are uncomfortable working in the "goldfish bowl", where their work is subject to friendly but severe cross-examination by colleagues and students which is characteristic of the teaching setting and which helps to make them better physicians.

When called upon to teach, they think primarily in terms of lecturing, not realizing that the main function of the teacher is to stimulate learning by the student, not by didactic lecturing, and that their primary role is to demonstrate what they know best: humane, personal care of patients. They do not realize there is no loss of face in saying, "I don't know," provided they look up the answers. Students and residents understand and respect their honesty because no one can know everything, but they are quick to spot the person who tries to save face by bluffing his way through.

The full-time teachers also have their faults. Many of them have never practiced outside of a university hospital and do not understand the patient as a person in his environment as do the practicing physicians. Their practice has become highly specialized and, from the standpoint of the patient, university hospital ambulatory care usually has been fragmented, lacking continuity, and has been charged with being highly impersonal, a charge which is not always justified.

Full-time faculty are often heavily engrossed not only in research but in the complex administrative activities of seeking extramural funding for their programs and the committee work involved in the medical school operation. Although student/faculty ratios at most medical schools are low, the student/faculty contact is often limited, especially with the senior and more prestigious faculty members.

As medical school enrollments have increased, the close interpersonal relationships between faculty and students have diminished. It is often said with much justification that the residents are the primary teachers of the medical students. In short, the medical schools have not had suitable role models for these students to emulate who wish to enter private practice, or if the role models are present, as they often are, there are few opportunities for the student to identify with these faculty members.

Unfortunately, many members of medical school faculties have not appreciated the fact that these deficiencies exist, that they are important, and that they would be better physicians and teachers if they spent some time working with other physicians in the community.

The transition to the full-time system was not accomplished without problems, and the conflicts which occurred occasionally became virtual town and gown wars. There

(CONTINUED ON PAGE 63)

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just one chewable tablet, once, usually eradicates pinworm in both children and adults†, and without staining

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(mebendazole)



Indications Vermox* (mebendazole) is indicated for the treatment of ***Trichuris trichiura*** (whipworm), ***Enterobius vermicularis*** (pinworm), ***Ascaris lumbricoides*** (roundworm), ***Ancylostoma duodenale*** (common hookworm), ***Necator americanus*** (American hookworm) in single or mixed infections.
Efficacy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Trichuris	Ascaris	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	—	(90-100%)
egg reduction mean	93%	99.7%	99.9%	—
(range)	(70-99%)	(99.5-100%)	—	—

Contraindications Vermox is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.
Precautions ***Pregnancy:*** Vermox has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since Vermox may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.
Pediatric use: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.
Adverse reactions Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.
Dosage and administration The same dosage schedule applies to children and adults.
For control of trichuriasis, ascariasis, and hookworm infection, one tablet of Vermox is administered morning and evening on three consecutive days. For control of enterobiasis, a single tablet of Vermox is given.
If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.
How supplied Vermox is available as tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
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OJ 288-5

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THE PRACTICING PHYSICIAN AND THE CLINICAL TEACHER

(CONTINUED FROM PAGE 61)

developed in reality two worlds of medicine, that of the full-time academicians and that of the private practicing physicians, with very little communication and understanding between the two groups.

The pendulum is beginning to swing back now, hopefully, to a middle point where the strengths of the full-time system can be retained, and the strengths of the practicing physicians in the teaching program can be recaptured.

The forces moving the pendulum in this direction are several but center largely upon the public concern for health care delivery. The Regional Medical Programs, the area health education centers, the family practice movement, and the development of community-based medical schools such as that at Rockford, Illinois, and the clinical campuses at Tuscaloosa and Huntsville, are contributing to moving the pendulum and are creating a demand for the practitioner/teacher in addition to the investigator/teacher.

These pressures, generated by the public's concern for health care delivery, are being felt by the traditional medical schools, many of which are responding by creating departments of family medicine and community medicine, by modifying residencies to train more general internists and pediatricians (primary care physicians), by engaging in research and demonstration programs in health care delivery, and by developing ways to decentralize their educational programs to involve community hospitals to a greater extent.

Thus, there are increasing opportunities for the practitioner to participate again in medical education either on a part-time basis or as a full-time member of one of the newer programs. Even some of the traditional medical schools are welcoming a few practicing physicians as members of their faculties.

Many schools have resource people trained to help teachers teach better, and this should help the practitioner-teacher. Such resources exist on all three UA campuses—UAB, Tuscaloosa and Huntsville. Hopefully, many practicing physicians will accept this opportunity and challenge to become teachers. If they do, we may see once more a united profession in which practitioners become academicians and academicians broaden their horizons by some experience in practice which they can acquire through some of the new programs affiliated with medical schools or on their own. ■



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JOURNAL

of the Medical Association of the State of ALABAMA

ALABAMA PHYSICIAN

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JANUARY 1976

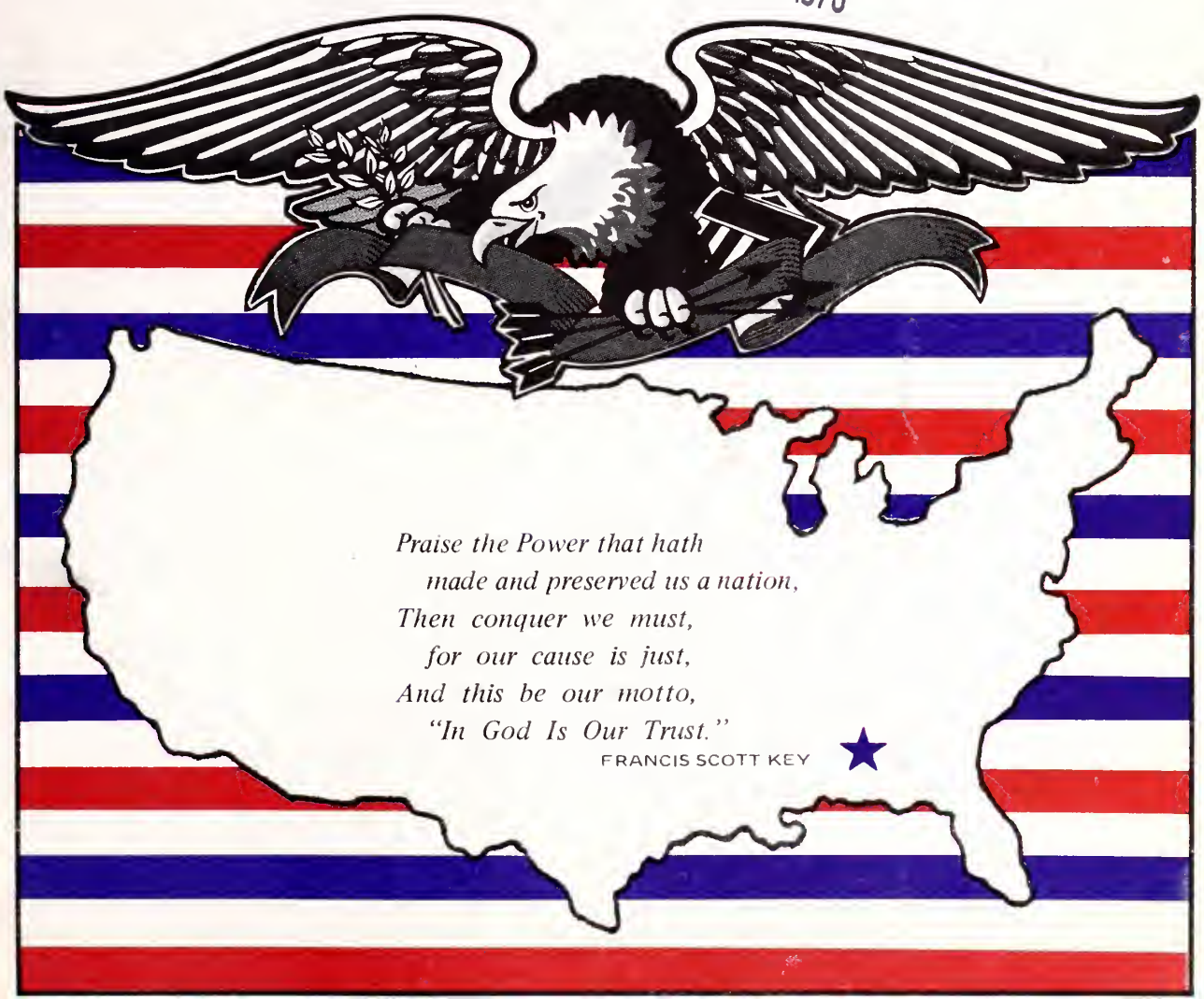
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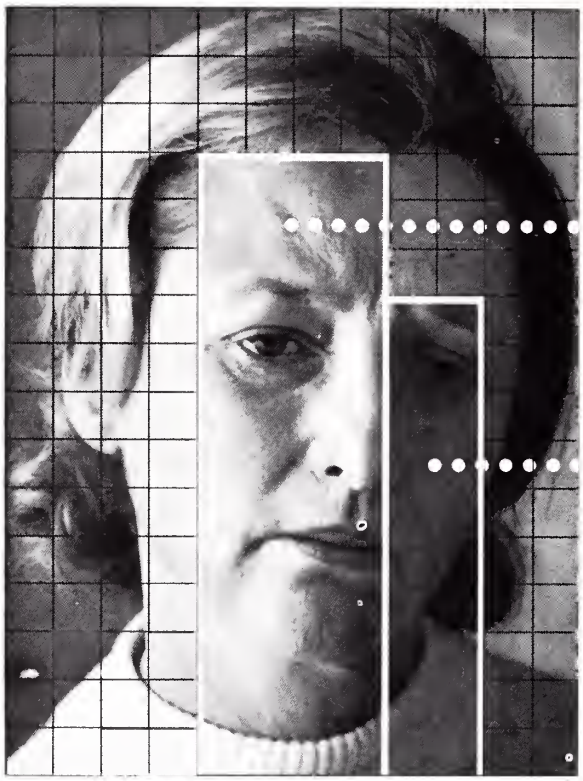


Praise the Power that hath
made and preserved us a nation,
Then conquer we must,
for our cause is just,
And this be our motto,
"In God Is Our Trust."

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PHILADELPHIA, PA 19103

Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium®
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2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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The JOURNAL

of the

Medical Association of the State of Alabama

VOLUME 45, NUMBER 7 JANUARY 1976

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price $12.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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To the physician-members of this Association, the saving of a life is a routine thing. But seldom does the opportunity present itself for a lay member of the staff to achieve such heroic proportion.

But such an incident did occur last month and the fact that a little girl is living today, who otherwise most probably would have died, makes the Central Office staff both humble and proud.

This story all began at a staff meeting back in December when someone mentioned a recent news article concerning the Heimlich Maneuver for dislodging food matter from the throat.

Director of Communications Jim Stallings contacted Mr. Jay Lewis, moderator for a popular weekly television show broadcast by Montgomery station WSFA-TV, to inquire whether a demonstration of the procedure would be feasible. Mr. Lewis eagerly accepted the offer to provide a physician to demonstrate and explain the technique.

Dr. Earl M. Simmons, Jr., of Montgomery, volunteered to perform this duty and the program was broadcast shortly before Christmas.

We now present a letter from a mother of a 3½-year-old girl which will finish the story:

"Dear Mr. Jay Lewis:

I would like to tell you of an incident that happened to our family on Christmas day.

I have a little girl, Michelle, who is 3½-years-old. She was eating some Life Savers (I am enclosing one just like she had) when it got stuck in her throat. It was still wrapped. She was choking to death. I jerked her up and turned her upside down and hit her on the back, but it never would come up. My father took her and I ran next door to get our neighbor, Mrs. Stone. I told her what was wrong and by the time we had got back here, she had done got limp. She couldn't breathe. Mrs. Stone took her from my father and hit her between the chest and stomach. It popped right out.

It so happened that she was watching Composite one day and you had someone on your show that was demonstrating just that very thing. I thanked her and she said that I should thank you and your wonderful show, for if it had not been for you and Composite, she wouldn't have known what to do either. Thanks to your show and our neighbor, I still have my little girl, and she is just fine now.

Thank you so very much.

Sybil Terry"

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OSHA—the Occupational Safety and Health Act of 1970—benefits everybody. Employers and employees alike.

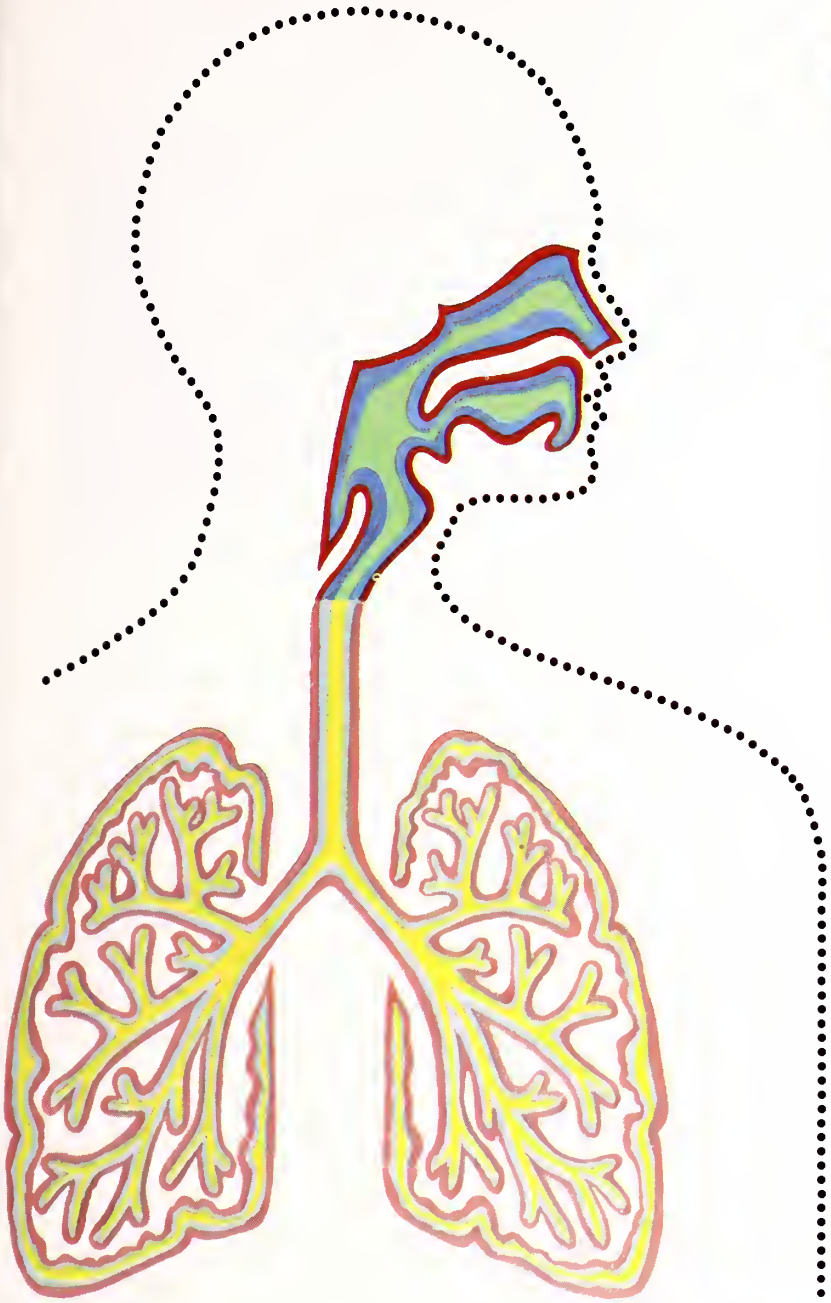
Today, Red Cross is helping employers all over the country to meet OSHA standards, by training employees in first aid and hazard recognition practices. The result is that, everywhere, factories and other places of business are safer and healthier. Another side benefit: employees trained in first aid are more valuable employees.

Next time you wonder where "all those dollars you gave to the Red Cross" are going—you might consider this: a lot of them are being plowed right back into your business! For information about First Aid Training call your local Red Cross Chapter.



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CONTRAINDICATIONS: RYNATAN is contraindicated in those patients who are sensitive to sympathomimetic drugs.

PRECAUTIONS: Use with caution in patients with hypertension, hyperthyroidism, diabetes or coronary artery disease, warn of possible drowsiness in patients who may operate vehicles or machinery.

ADVERSE REACTIONS: Drowsiness and dryness of the mouth are occasionally associated with antihistamine therapy in some individuals.

DOSAGE AND ADMINISTRATION: RYNATAN TABLETS: 1 or 2 tablets every 12 hours.

RYNATAN PEDIATRIC SUSPENSION: For children over six years of age, 5 to 10 ml. (1 to 2 teaspoonfuls) every 12 hours; for children two to six years of age, 2.5 to 5 ml. (½ to 1 teaspoonful) every 12 hours; for children under two years of age, 1.7 ml. (⅓ teaspoonful) every 12 hours.

CAUTION: Federal (U.S.A.) law prohibits dispensing without prescription.

RYNATUSS®: Each tablet contains Carbetapentane Tannate, 60 mg.; Chlorpheniramine Tannate, 5 mg.; Ephedrine Tannate, 10 mg.; Phenylephrine Tannate, 10 mg.

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INDICATIONS: In the treatment of coughs due to the common cold, asthma, and in acute and chronic bronchitis.

CONTRAINDICATIONS: RYNATUSS is contraindicated in those patients who are sensitive to sympathomimetic drugs.

PRECAUTIONS: Use with caution in patients with hypertension, hyperthyroidism, diabetes or coronary artery disease, warn of possible drowsiness in patients who may operate vehicles or machinery.

ADVERSE REACTIONS: Drowsiness and dryness of the mouth are occasionally associated with antihistamine therapy in some individuals.

DOSAGE AND ADMINISTRATION: RYNATUSS TABLETS: Adults—1 to 2 tablets every 12 hours.

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The above represents a brief summary. See package inserts for full prescribing information.

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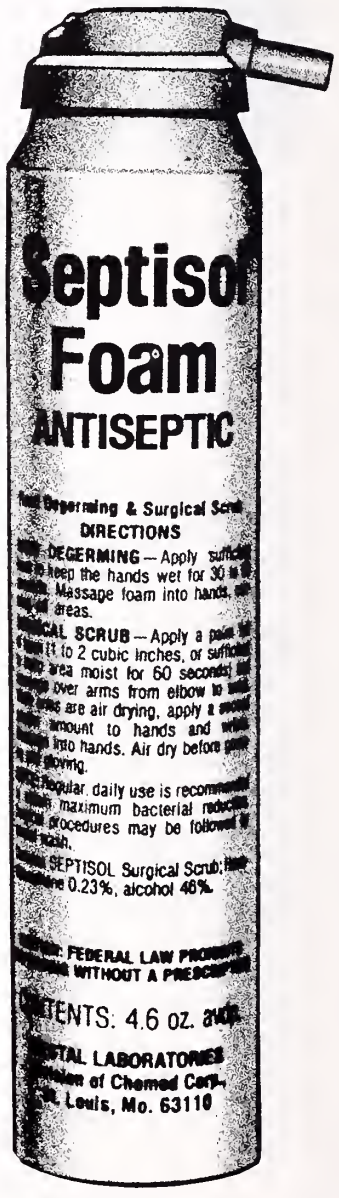
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A Challenge— Not An Awesome Situation



E. Vernon Stabler, Sr., M.D.

A New Year by tradition has signaled to one and all that we must look backward for a year and forward for a year, as though we should not evaluate our lives and activities weekly or even daily. What is more, we must be "computerizedly" accurate if we are to successfully live and cope with the devastating speed of today's pace of life, our own responsibilities and our opportunities, as well.

A few glances at our past year might give us assurance and courage to go on to the year ahead. We were successful in a number of endeavors - enough to be proud to a degree if not fully satisfied - and under considerable opposition at that. All that is past - it can now be useful only in evaluating our mistakes accurately so that we may improve thereby. On the other hand, the year ahead has so many problems already in view that it seems awesome. Perhaps, however, we should accept it as a challenge and not as an insurmountable obstacle. We all know more shoals and rocks lurk yet uncovered, nevertheless, they are to be traversed, and it can be done successfully.

Obviously our greatest task now is the solution of our malpractice dilemma. I feel that we are well on the way, and on firm ground. We can solve this gigantic chore now in a more stable way than ever before. The choices available are encouraging. Obviously, tackling the problem at once has reduced fear to feasibility - a solution is evident.

More definite legislation is needed in several areas of health care and service, paramount being stronger malpractice regulations, albeit our recent liability law. But, many other points of law also need strengthening. We are dedicated to working for each field of health care that needs us. Protection of confidential information, privacy of patient-doctor relations, freedom to practice without undue restraint or red tape by bureaucratic meddling, are but a few of the many legislative reforms to be promoted.

There is now an ever present question in a matter until lately never jeopardized - who is to judge the delivery of quality medicine, the Profession or the bureaucrats? The very ill-advised theory which the bureaucratic hierarchy seems to take, and is determined to act upon, is that because the necessary money is to be provided by them, they promptly become the arbiters and dictators of the "how" and "why", "when" and "by whom". It is obviously an assumption of a service not justified by their capabilities. Government business is to provide the means — those of training and experience must direct and implement. Let each confine himself to his proper role. Let red tape be replaced by simplicity and accuracy to accomplish only the necessary.

No segment of our society out-distances the medical world for achievements in the past. The future of health care would appear of such magnitude and promise that our medical accomplishments of today may well be dwarfed — if only we can keep the hand of political meddling and bureaucratic bungling away from the drive to success.

The future may seem awesome. Actually, it is a fascinating challenge for those willing to diligently serve.

Were I of the lilt of mind to dream of things to come, I would envision Plato's Democracy so instituted that only those of ability, dedication and impeccable honesty would run each segment of our government, allowing each person fullest leeway in governing to implement his own highest goals. In this way, great advancements would be commonplace.

E. Vernon Stabler



TO EVALUATE A PSYCHIATRIC HOSPITAL, YOU NEED COMPLETE INFORMATIO

That's why we have prepared a 12-page brochure about Tranquilaire Hospital, which we'll gladly send you.

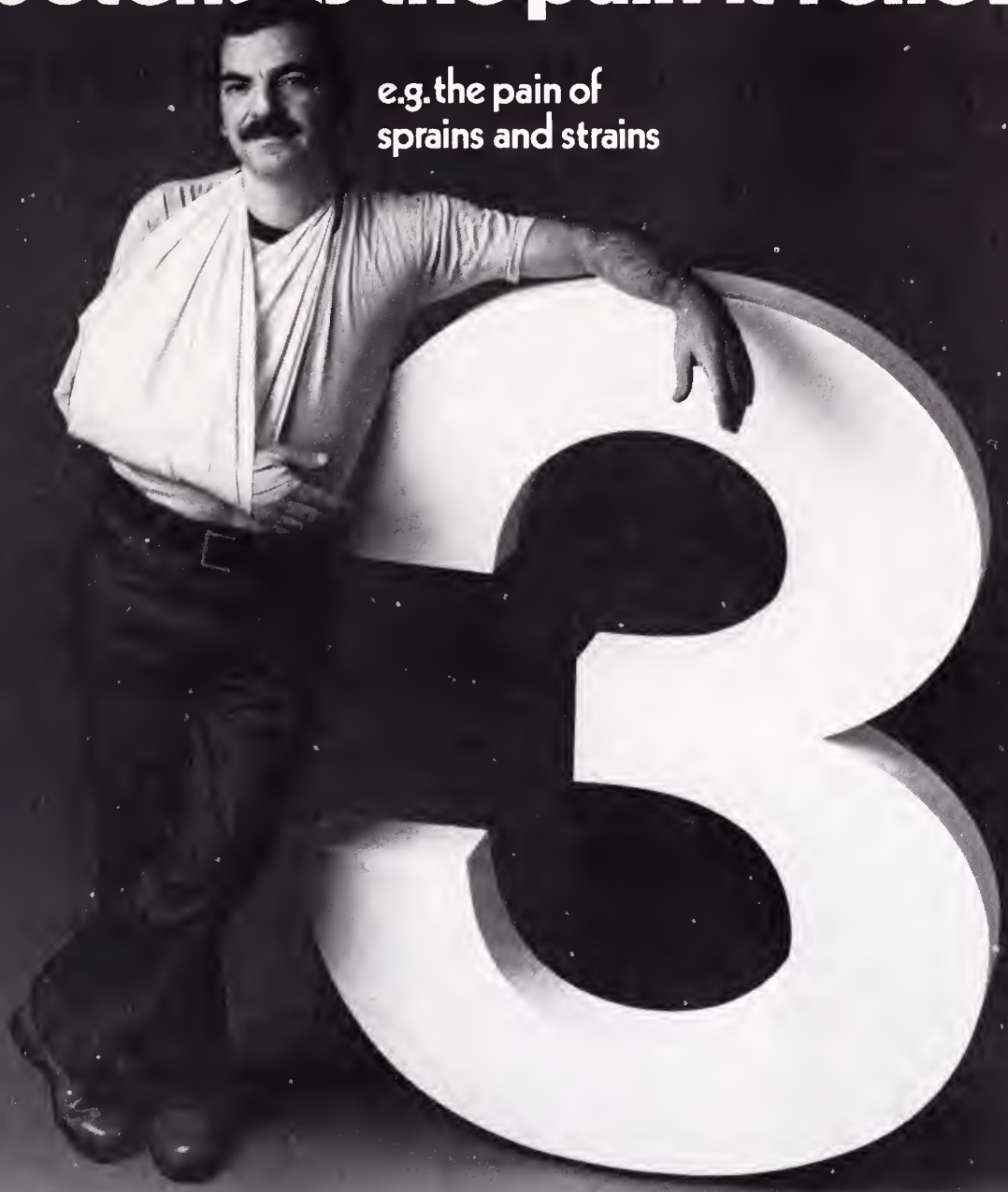
In the meantime, let us supply you with a few facts: we are housed in a modern, informal building built in 1972; there are ten highly-respected psychiatrists on our staff; the hospital is a Blue Cross member hospital, is accredited, and is certified for medicare and medicaid.

To learn more, just write or call Robert E. Cole, Administrator. He'll send you a brochure and answer any questions you may have.



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e.g. the pain of sprains and strains



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Effectiveness across the spectrum of most common forms of insomnia

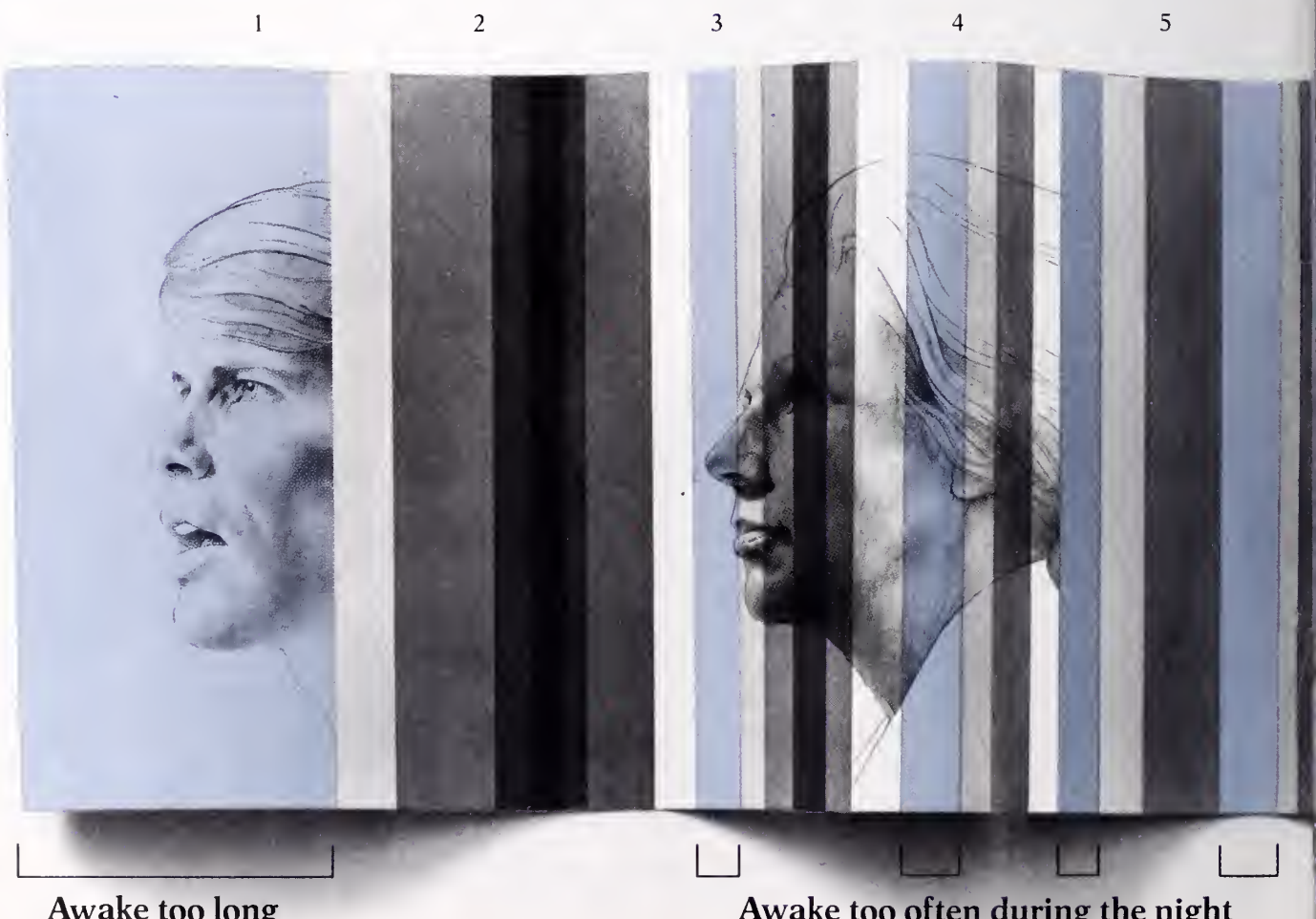
Awake too long, awake too often, awake too early...

These are the most common forms of insomnia, and may occur singly or in any combination. The night of troubled sleep depicted here comprises all three types. As the night progresses from left to right, each sleep stage is identifiable by its own shade of gray. Blue represents "Awake."

As you can see, this hypothetical "patient" takes well over an hour to fall asleep, awakens several times during the middle of the night and awakens too early in the morning.

Sleep Stages

- Awake
- REM
- Stage 1
- Stage 2
- Stage 3
- Stage 4



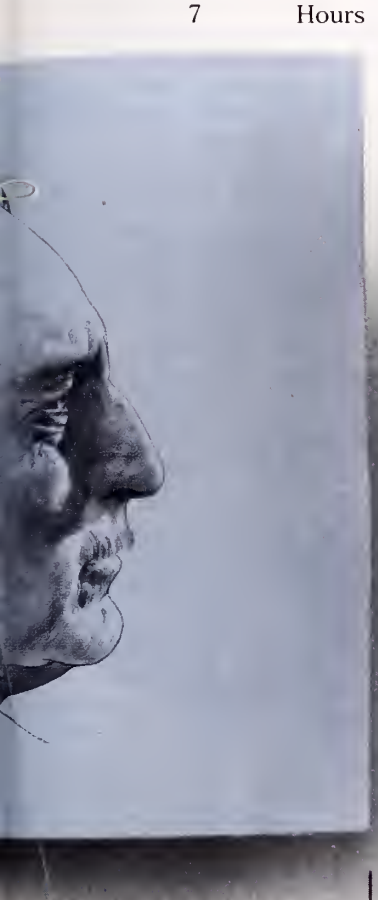
The insomnias most often occurring in young and older adults

For patients with trouble falling asleep (common in young adult insomnia patients), Dalmane (flurazepam HCl) 30 mg provides sleep within 17 minutes, on average. For those with trouble staying asleep or sleeping long enough (common in those over 50), Dalmane offers increased total sleep time with fewer nocturnal awakenings. These clinical results were demonstrated in studies conducted in four geographically separated sleep research laboratories![1-4]

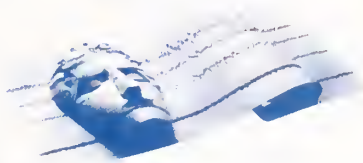
The relative safety of Dalmane (flurazepam HCl) is well documented

Dalmane (flurazepam HCl) is relatively safe and well tolerated; morning "hang-over" has been infrequent. The usual adult dosage is 30 mg; in elderly or debilitated patients, limit initial dosage to 15 mg to preclude over-sedation, dizziness or ataxia. Caution patients about possible combined effects with alcohol and other CNS depressants.

Broad-spectrum medication for the most common forms of insomnia



Awake too early



Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

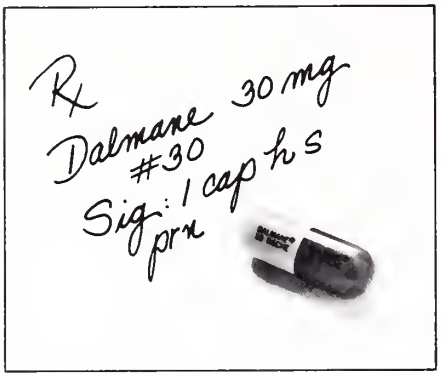
- ☐ induces sleep rapidly
- ☐ reduces nighttime awakenings
- ☐ lengthens total sleep time

ROCHE

Please see following page for a summary of complete product information.

Broad-spectrum medication for the most common forms of insomnia

Dalmane®
(flurazepam HCl) Ⓒ IV



Objectively proved in the sleep research laboratory, Dalmane

- induces sleep within 17 minutes, on average
- reduces nighttime awakenings
- provides 7 to 8 hours sleep, on average, without repeating dosage

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

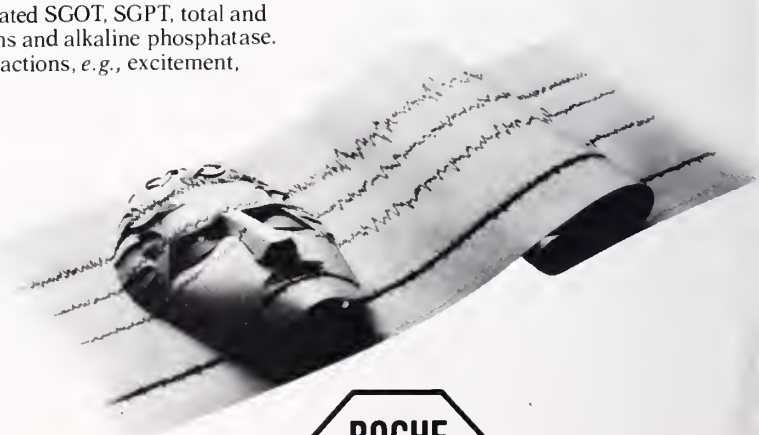
Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971
3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ



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Nutley, New Jersey 07110

GUEST EDITORIAL

Mercy Caring vs. Mercy Killing...

editorials
editorials

Justifiable Use Of Conservative Therapy Only

Donald McCarthy, Ph.D.*

The Declaration of Independence affirms that "all men are created equal and endowed by their Creator with inalienable rights to life and liberty." That Declaration speaks to the medical profession in today's difficult ethical decisions. It says all men are equal, regardless of their degree of health, wealth, popularity of I. Q. level. It says that this mysterious equal dignity of all human persons is an existential endowment which serves as the foundation of civil rights and civil liberty.

In fidelity to that magnificent "Equality Doctrine", no individual person can justifiably kill another innocent person. The killer would abandon equality by assuming the role of executioner and the equal dignity of the victim would be effectively canceled by the violent act. In the Judaeo-Christian tradition, a person cannot justifiably choose to abandon his or her participation in the community of human experience by suicide or requested mercy-killing. This tradition rests on the unique value of human life which, although not an absolute value, still has not been subject to counter-balance from human disvalues like suffering.

The "Equality Doctrine" has preceptive as well as prohibitive implications. It commands human persons to create communities which foster the equal dignity and rights of their members. That means, for example, communities which provide health care for their members. Health professionals uphold equality by the unspoken principle that they will work methodically for the care and cure of each patient regardless of their inequality of income, intelligence or social usefulness.

However, the recent Karen Quinlan case in New Jersey suggests the importance of reaching a professional consensus on reasonable limits of health care. A consensus could be found for the use of an Ma-1 respirator following lung surgery or in the early stages of care while attempting to overcome an unexplained coma such as Karen's. After six months the respirator no longer offered very significant hope of human benefit to Karen, it was merely prolonging a "persistent vegetative state." Could physicians develop a professional consensus which would leave the continued use of a respirator in such cases to the option of the patient or family? Would turning off the respirator constitute morally an act of mercy killing or a legitimate change in medical treatment?

Mercy killing has traditionally meant acts which destroy human life for compassionate reasons. However, the phrase "passive euthanasia" is now used by some to describe the process of "allowing to die" for compassionate reasons. Unfortunately, the term "passive euthanasia" can cover a wide range of omissions which allows someone to die, even the omission of very basic and beneficial health care. Thus prospective heirs might allow a diabetic grandparent to die by hiding the insulin and suggest that this would be an acceptable example of merely passive euthanasia.

To indicate the clinical factors involved in omitting certain life-prolonging procedures, a better and more accurate description of these situations would be "Justifiable Use of Conservative Therapy Only" (abbreviated JUCTO). Even though death may result rather quickly in some cases, as in turning off a respirator, or much less quickly in others, as in omitting some forms of palliative surgery, the moral consideration here is not one of **killing** but of the appropriate type of **caring** and therapy. When physicians in treating a given patient reach the decision that heroic measures and aggressive treatment are clearly useless to that patient, their decision in favor of JUCTO should not be construed as mercy killing but as mercy caring.

In the light of the above, it seems Karen Quinlan's physicians could well reach a professional consensus to practice JUCTO. This obviously has been the wish of Karen's family. To avoid a legal judgment that such an action is "homicide-by-omission", the courts must establish a respect for the professional consensus involved. In that consensus, physicians will be left free to omit life-prolonging procedures which offer no reasonable benefit to patients and are rejected by patients or their representatives. This is **not** an advocacy of suicide or mercy killing.

The Declaration of Independence teaches physicians to use responsibly the tools in their medical tool-chests to care for each priceless patient, each marvelous human person. But they must be left free to both use and cease using those tools, including respirators, according to the real benefit these tools bring their patients. In medicine, the **art** of healing involves **prudent** judgments in selecting modes of therapy which offer authentic human benefit to the patient. ■

(CONTINUED ON PAGE 16)

***Professor of Christian Ethics, Mt. St. Mary Seminary, Cincinnati, Ohio. Presented the evening of November 25, 1975 before the staff of St. Margaret's Hospital, Montgomery.**

(CONTINUED FROM PAGE 15)

The Beloved Physician Of Wilcox County

The medical profession lost one of its grandest practitioners last month with the passing of Dr. J. Paul Jones, Camden. He will be remembered not only for the wealth of service which he gave in his professional capacity, but also for his notable contributions to his family, his state and his country.

Dr. Jones was a man uniquely blessed with a keen sense of humor, a sharp wit and an appealing personality. With these and his medical talents combined, Dr. Jones lived a committed life in the service of mankind and for the furtherance of organized medicine.

He established his general practice in Camden in 1920, with a small office on Claiborne Street. In 1949, he built the Jones Clinic and it was here that he continued to practice until his death.

Dr. Jones was not one to turn aside from opportunity of service. Numerous examples throughout his distinguished career reflect his activity. His outstanding support and leadership in the American Legion are well known. He was an active member in the Camden Methodist Church, Exchange and Lions Clubs, served on the board of directors of a Camden bank and at one time served on the Camden City Council.

His years of service to his profession include former President of MASA, former Chairman of the State Board of Censors, former President and Sec.-Treas. of the Wilcox County Medical Society, Interim State Health Officer in 1962, Delegate from Alabama to the AMA House of Delegates, member of the Rural Health Council--and the list could go on.

It is reported that the night he passed away he journeyed to the hospital to see one of his patients before retiring for the evening. It is quite fitting to realize that perhaps the last person to see Dr. Jones alive was his patient that night. ■

Lives Being Saved

It has been reported *(New York Times Magazine,* June 16, 1974) that each year approximately 3,900 healthy individuals in the United States strangle because of food stuck in their throats. This statistic does not reflect, however, the probability of a much higher number of individuals whose unsuspected food-choking is not reported.

Food-choking incidents here in Alabama are now reaching news headlines more often, along with specific details for implementation of the Heimlich Maneuver, a new life-saving technique introduced by Dr. Henry J. Heimlich, of Cincinnati. Recent uses of the Maneuver have been reported from Montgomery and Jefferson Counties. In one, the life of a 3½-year-old girl was saved by a neighbor who had seen one of MASA's physicians demonstrate the technique on television.

Alabama physicians have responded well to inquiries from the news media to appear on radio and television to promote the Maneuver and advise the public on its application.

Food-choking is the sixth leading cause of accidental death. Its victims number more than those accidentally killed by firearms or in airplane accidents. To save people from food asphyxiation, more information about this valuable first-aid procedure will need to be distributed to the general public in the days ahead. Information on the Heimlich Maneuver is now available from MASA Headquarters for Alabama physicians and the Alabama news media.

New Laws Arrive With '76

A new year was not the only thing which arrived January 1, 1976. Several new Federal laws became effective as of that date. One will affect about 18 million Americans; another will affect only one. Most will place another squeeze on the American taxpayer's wallet.

All individuals, whether directly or indirectly, will eventually feel the ripples from these new laws and therefore all should possess at least some "walking-around" knowledge about them. Physicians will be particularly interested in those regulations concerning social security taxes (see p. 18) and hospitalization costs for Medicare beneficiaries.

The big one is a new wage base for social security taxes. The Social Security Administration will levy taxes on the first $15,300 of each wage earner's income in 1976. In 1975, taxes were levied on the first $14,100.

To be more specific, the maximum social security tax a wage earner will pay in 1976 will be $895.05, up $70.20 from 1975.

The change is expected to produce an estimated $2.1 billion in revenue, helping to finance higher benefits for retirees and adult welfare recipients.

Among the new laws is a 13 per cent rise in "out of pocket" hospitalization costs for Medicare beneficiaries. This is the "deductible" portion the patient pays out of his pocket when he first enters the hospital, before Medicare takes over. It is up about $10 over 1975.

Other laws include sweeping changes in pension plan requirements for private companies, interest disclosures by companies to their consumers who are using a credit card system, a 3-cent stamp increase for first-class mail and a law now requiring President Ford to charge his costs for appearances at political events against his campaign spending limits. ■

For Sale: An equipped Dr.'s Clinic located at 800 - 3rd Street, Childersburg, Ala.

For Lease: A Dr.'s Clinic located at 1947 Warrior Rd., Bham, Ala.

For further information contact David Rogers 1st Nat'l Bank of Bham, Ala. Phone: 328-5120, Ext. 636.

Letters to the Editor

Opinion, Not Fact

The article "Nutrition and Aging of the Heart" by Dr. Rudell in the November, 1975 issue of the *Journal* contains a number of misleading statements, half-truths, and downright errors. I am very much in favor of improving the role of the family physician - and in communicating medical information to the public. However, I vigorously oppose the publication in our state medical journal of statements and recommendations that do not have a sound scientific basis.

It is particularly distressing to see at this time of heightened public interest in nutrition an article of such poor quality as this, prepared by a physician who should actually be a knowledgeable source of authoritative and reliable information. It is unfortunate that the general subject of nutrition has been neglected in medical school curricula until recently.

Moreover, many physicians have been reluctant to use even their common sense, and the nutrition information that was, indeed, presented to them in medical school. The result has been that the legitimate field of nutrition has become the territory of quacks, charlatans, and self-appointed experts. Responsible physicians and journal editors must ask themself repeatedly, *"Is there an adequate scientific basis for this nutritional claim?"*

The following statements appear in the article by Dr. Rudell:

"Cow's milk accounts for a major amount of cholesterol and calcium in the diet."

"There is also XO (xanthine oxidase) in milk which is the main culprit causing aging of the coronary arteries."

"XO is not affected by the process of digestion."

"It (XO) is the enzyme known to be responsible for gout."

"Some plasmalogen is actually lecithin."

"XO attacks the phosphatide. When its activity is increased by homogenization, its attack is more devastating. It destroys the integrity of the coronaries."

Not a single one of the above statements is an accepted scientific fact. Not one of them is in keeping with current authoritative scientific and medical opinion. It is noteworthy that the Journal reader is given no indication of Dr. Rudell's qualifications to make such statements, and no references to the scientific literature are provided. In other words, this article is an expression of **opinion** - and should be identified as such or else printed as an editorial. I trust it does not express the policy of the State Medical Society, and yet this is how it is likely to be construed.

The choice of words in the last 3 sentences quoted above is interesting: *attacks, attack, devastating, destroys, integrity*. It seems clear that the author is using "scare tactics". What mother, upon reading this, would dare to let her child drink a glass of homogenized milk?

Finally, let me refer you to an analysis of this subject by two well-known authorities, Dr. E. L. Bierman and Dr. Robert E. Shank. This appeared (properly) as an editorial in JAMA on November 10 (vol. 234, pages 630-631, 1975). The final paragraph of the editorial is as follows:

"The conclusion seems warranted that a hypothesis has been stated and restated by a single protagonist. It remains tenuous and implausible and requires support from critically designed experiments. At this time it is far from an established fact that the drinking of homogenized milk contributes to mortality from coronary artery disease through the intestinal absorption of bovine xanthine oxidase. To advise the public to avoid homogenized milk or to boil milk for this purpose, on the basis of this meager published evidence, is unwarranted and unjustified."

C. E. Butterworth, Jr., M.D.
Professor of Medicine & Pediatrics
Director, The Nutrition Program
UAB Medical Center

Personal Tribute To Dr. Jones

"How meagre is the picture of the man as known to his friends. The traits which made his life of such value - the patient spirit, the kindly disposition, the sustained zeal."

Death put an end to a long and distinguished career devoted to medicine and humanity when Dr. J. Paul Jones of Camden died Wednesday, December 17, 1975 and took from Alabama a very great and gentle man.

As a physician and friend, no job which helped another was ever beneath his dignity. He constantly sought and acquired more knowledge. All his life he studied and practiced medicine, never quite satisfied that he could not improve his ability to aid others.

The great genius of J. Paul Jones was his love of humanity and his acceptance without judgement of the many frailties of human nature. But what made him outstanding was not just his wide medical knowledge, but his interest and respect for each person he met; he accepted with compassion all people of any faith or color. He made the lives of all who met him better for having known him.

"During these last months he has walked with death as if death were a companion, an acquaintance whom he recognized and did not fear. In the end, death came as a friend and, after a happy day in the office, he fell asleep."

Dr. Jones will always stand tall in the annals of Alabama medicine.

Howard L. Holley, M.D.
Birmingham

(CONTINUED ON PAGE 18)

(CONTINUED FROM PAGE 17)

The Heimlich Maneuver

I am enclosing an article from the AMA Journal (Oct. 27, 1975, Vol. 234, No. 4, p. 398) which you may have seen already about the Heimlich Maneuver, a life-saving technique to prevent food-choking.

I would like to suggest that your Council on Public Affairs consider publishing this in a booklet or brochure form, or a paraphrasing of this for public consumption. Every school child, restaurant manager and waitress, and other key people should have access to this information. I would think that if your Committee could make up such a brochure, the State Department of Education would collaborate in printing and disseminating such a brochure state-wide.

This is a real problem which is very common. Dr. Sigmond Kahn lost his wife in this manner. Dr. Dick Bruhn was in a restaurant recently and saved a person using this technique, and a close personal friend recently at Joe's Ranch House had it happen and was miraculously saved by someone reaching some sort of an instrument from the kitchen down her throat and getting the meat plug out.

I would appreciate it if you would bring this to the attention of your Council.

E. W. Stevenson, M.D.
Birmingham

A Change Of Heart

Several months ago, I wrote a letter to you which was very critical of The *Journal.* I intended it as a sincere but critical appraisal of a publication which I felt did not attempt to provide any professional educational material to the practicing physician. The quality of articles that were previously published were poor and my feeling, at that time, was that The *Journal* served a political purpose only.

I have thoroughly enjoyed reading The *Journal* for the past six months. The print is excellent and the articles and their presentations are outstanding. I truly feel that The *Journal* is greatly improved and wish to congratulate you on this accomplishment.

Jerry A. Davis, M.D.
Tuscaloosa

Social Security Taxes Increase

Self-employed physicians will pay $94.89 more to the Social Security program in 1976. The maximum tax level for the self-employed will be $1,208.70. For salaried individuals the maximum tax will rise to $895.05 from $824.85 in 1975. Tax rates of 5.85% for each employer and employee and 7.9% for the self-employed won't change, but the taxable base will be increased to $15,300 from the 1975 base of $14,100. ■

Is there a tablet containing *only* an expectorant and *only* Glyceryl Guaiacolate? YES!



HYTUSS TABS

(GLYCERYL GUAIACOLATE 100mg.)

1. Patient acceptable tablet dose.
2. Single entity expectorant.
3. Measured tablet dose.
4. Sugar-free tablet.

An identifiable white, scored tablet which significantly stimulates the secretion of respiratory tract fluid.

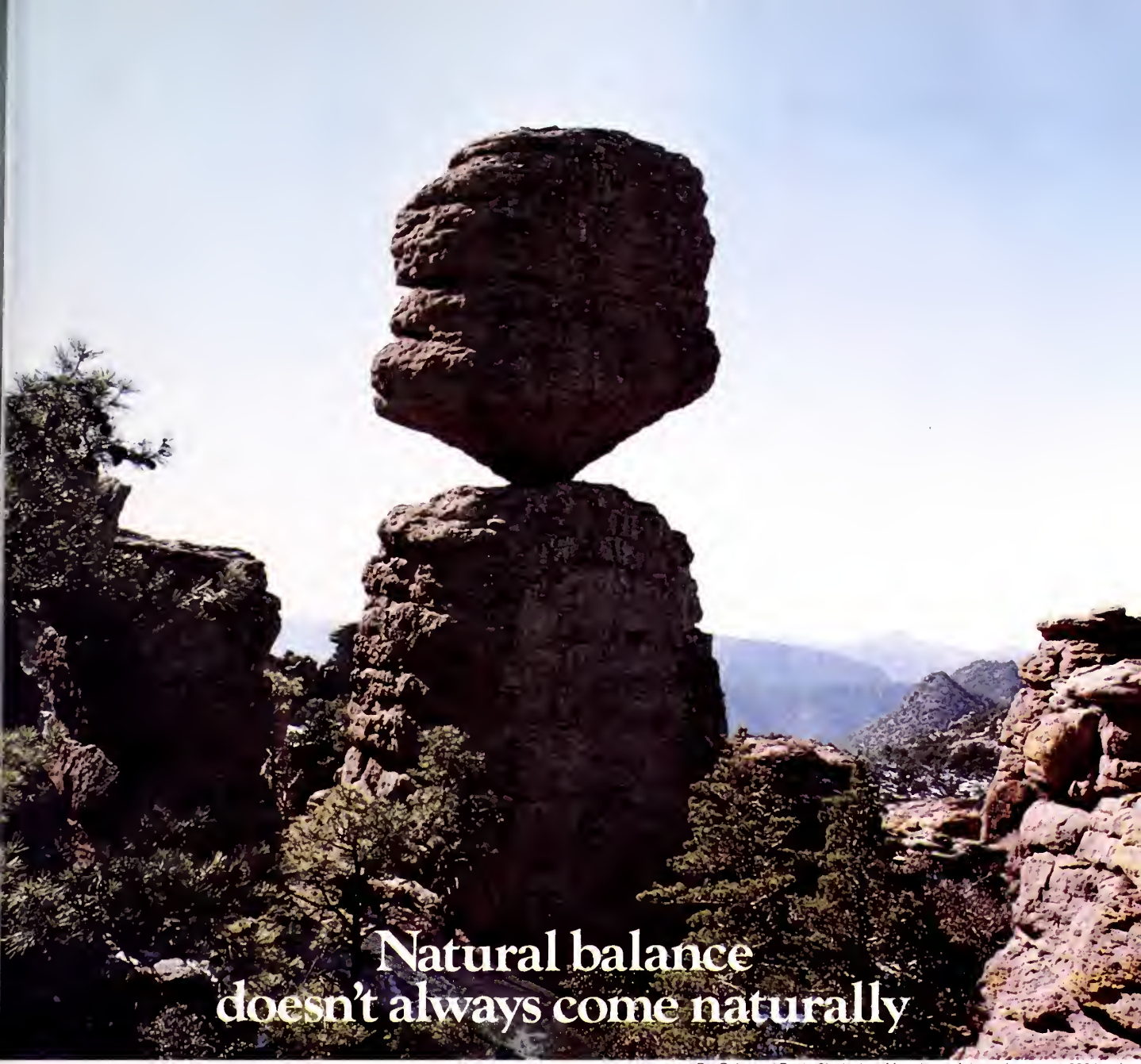


Composition: Each sugar-free compressed tablet contains glyceryl guaiacolate 100mg. **Action and Use:** This preparation utilizes the effective expectorant action of glyceryl guaiacolate which signiticantly stimulates the secretion ot respiratory tract fluid. The increased flow ot less viscid fluid favors expectoration and has a demulcent ettect on the tracheobronchial mucosa. The primary usefulness ot Hytuss Tabs is to promote the change from a dry, unproductive cough to a productive cough. Hytuss is therefore usetul in treating coughs due to the common cold, bronchitis, laryngitis, tracheitis, pharyngitis, intluenza and the measles. The expectorant action of Hytuss may also provide symptomatic reliet in some chronic respiratory disorders when the patient experiences spasms ot dry nonproductive coughing. **Precautions:** Extremely large amounts may cause nausea and vomiting. **Administration and Dosage:** *Adults*—1 tablet four times daily. *Children*—6 to 12 years of age; ½ tablet 3 or 4 times daily. HOW SUPPLIED: White, scored, sugar-free, tablet in bottles of 100 - 1,000 - 5,000. **Product Identification Mark:** Hy. **Literature Available:** On request.

Available through all drug wholesalers.

Hyrex

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832 South Cooper
Memphis, Tenn. 38104



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

□ Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
□ Can relieve nausea and vomiting often associated with vertigo.*
□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
□ Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
□ Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

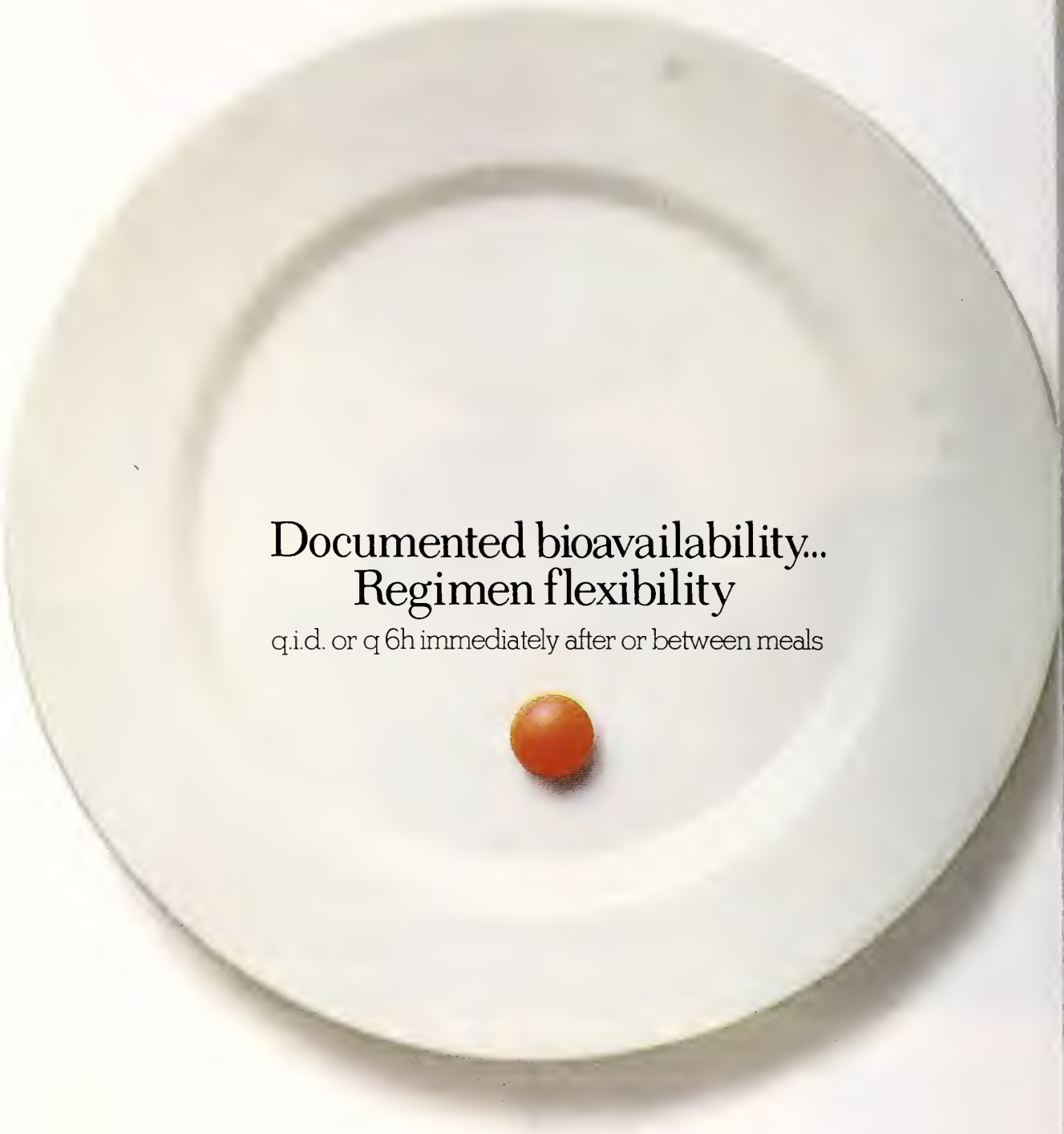
Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*



Documented bioavailability...
Regimen flexibility

q.i.d. or q 6h immediately after or between meals

E-Mycin®

erythromycin enteric-coated tablets, Upjohn

250 mg

Formulated for quality...
Priced for economy.

Upjohn

See facing page for brief summary of prescribing information.

J-4889-9

E-MYCIN® TABLETS — 250 mg — For Oral Administration (erythromycin enteric-coated tablets, Upjohn)

E-Mycin Tablets (erythromycin enteric-coated tablets) are specially coated to protect the contents from the inactivating effects of gastric acidity and to permit efficient absorption when administered either immediately after meals or when given between meals on an empty stomach.

Indications: *Streptococcus pyogenes (group A beta-hemolytic streptococci):* Upper and lower respiratory-tract, skin, and soft-tissue infections of mild to moderate severity. Parenteral benzathine penicillin G is considered by the American Heart Association to be the drug of choice in the treatment and prevention of streptococcal pharyngitis and in long-term prophylaxis of rheumatic fever. When oral medication is necessary (because the parenteral route is contraindicated) or if there is known allergy to penicillin, the following recommendations made by the American Heart Association apply: 1) Oral penicillin G or V (where no allergy exists)—This is the drug of choice. Give for a minimum of 10 days; 2) Erythromycin—Give for a minimum of 10 days. A few strains of streptococci resistant to erythromycin have been reported.

Alpha-hemolytic streptococci (viridans group): Short-term prophylaxis against bacterial endocarditis prior to dental or other operative procedures in patients with a history of rheumatic fever or congenital heart disease who are hypersensitive to penicillin. (Erythromycin is not suitable prior to genitourinary surgery where the organisms likely to lead to bacteremia are gram-negative bacilli or the enterococcus group of streptococci.)

Staphylococcus aureus: Acute infections of skin and soft tissue of mild to moderate severity. Resistance may develop during treatment.

Diplococcus pneumoniae: Upper respiratory-tract infections (e.g., otitis media, pharyngitis) and lower respiratory-tract infections (e.g., pneumonia) of mild to moderate degree.

Mycoplasma pneumoniae (Eaton agent, PPLO): In the treatment of primary atypical pneumonia, when due to this organism.

Treponema pallidum: Infections due to this organism.

Corynebacterium diphtheriae and *Corynebacterium minutissimum:* As an adjunct to antitoxin, to prevent establishment of carriers, and to eradicate the organism in carriers. In the treatment of erythrasma.

Entamoeba histolytica: In the treatment of intestinal amebiasis only. Extra-enteric amebiasis requires treatment with other agents.

Listeria monocytogenes: Infections due to this organism.

Contraindication: Contraindicated in patients with known hypersensitivity to erythromycin.

Warning: Safety for use in pregnancy has not been established.

Precautions: Erythromycin is principally excreted by the liver. Caution should be exercised in administering the antibiotic to patients with impaired hepatic function. Surgical procedures should be performed when indicated.

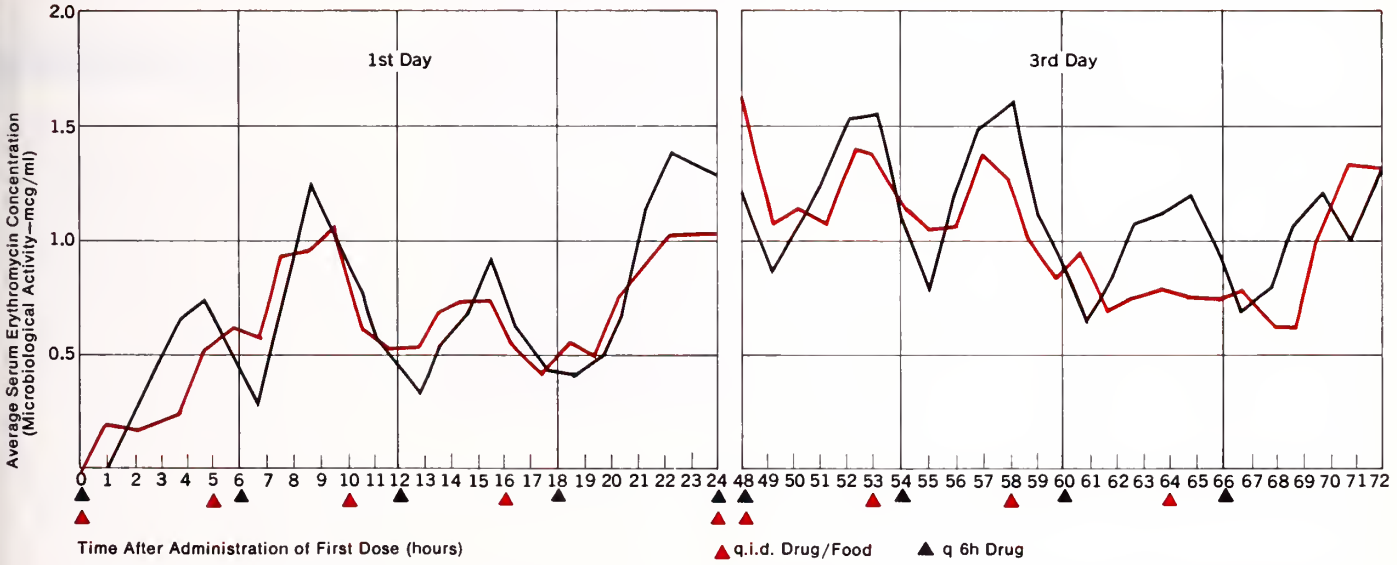
Adverse reactions: The most frequent side effects of erythromycin preparations are gastrointestinal, such as abdominal cramping and discomfort, and are dose-related. Nausea, vomiting, and diarrhea occur infrequently with usual oral doses. During prolonged or repeated therapy, there is a possibility of overgrowth of non-susceptible bacteria or fungi. If such infections occur, the drug should be discontinued and appropriate therapy instituted. Mild allergic reactions such as urticaria and other skin rashes have occurred. Serious allergic reactions, including anaphylaxis, have been reported.

Treatment of overdosage: The drug is virtually nontoxic, though some individuals may exhibit gastric intolerance to even therapeutic amounts. Allergic reactions associated with acute overdosage should be handled in the usual manner—that is, by the administration of adrenalin, corticosteroids, and antihistamines as indicated and the prompt elimination of unabsorbed drug, in addition to all needed supportive measures.

How supplied: 250 mg—in bottles of 100 and in unit-dose packages of 100 enteric-coated tablets. Caution: Federal law prohibits dispensing without prescription.

For additional product information, consult the package insert or see your Upjohn Representative.

Demonstrated bioequivalence of E-Mycin taken immediately after meals or between meals.



Regimen A (after meals)—One 250 mg E-Mycin® tablet administered q.i.d. immediately after breakfast, lunch, and dinner, and at bedtime with a snack.

Regimen B (between meals)—One 250 mg E-Mycin tablet administered q 6h at least two hours after meals.

E-Mycin Study CS076 on file at The Upjohn Company. The study was performed with twenty-two normal male adult volunteers utilizing a randomized two-way complete crossover design.

No statistically significant difference in area under the curve was observed from 0-24 hours or 48-72 hours at the 95% confidence level ($p > .05$).

The data clearly demonstrate that E-Mycin, when administered q.i.d. immediately after meals, produced average serum levels equivalent to those obtained when the drug was administered q 6h at least two hours after meals.

E-Mycin®

erythromycin enteric-coated tablets, Upjohn

250 mg

Formulated for quality... priced for economy

Upjohn

The Upjohn Company, Kalamazoo, Michigan 49001, U.S.A.
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MED 8 7 5

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration



Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

Opinion & Dialogue

The idea of a so-called patient package insert has been around for a long time. Many physicians already use written instruction sheets to provide patients with information about the drugs they are taking. And some physicians give verbal instructions; but in too many instances these are what I call eye-glazing exercises. I have seen patients sit with glazed eyes listening to a rapid-fire lecture by a hurried physician who has 20 people out in his waiting room. These patients aren't given sufficient understanding and therefore do not follow instructions. So I think the idea of an official package insert for patients is a good one. Perhaps we should really think of this kind of information simply as an extension of drug labeling.

The benefits of patient involvement

Many physicians may not realize how frequently a patient obtains his drug information from Aunt Tillie or the next door neighbor. And this information is almost always bad or irrelevant to the case at hand. Furthermore, the incentive to go along with a prescribed program is slim if the only reading matter the patient receives, along with his prescription, is a bill.

As an educator I am impressed by the principle that the best way to get someone to do something is to involve him in the process. So the

I think there are advantages as well as some real disadvantages in a patient package insert. When you begin to use semi-medical or medical terms to describe complications or possible sequelae of disease or treatment, you may frighten the patient—particularly since the more highly sophisticated patient is not the one who is going to read the insert. The patient who will read it is the one most susceptible to fright and confusion by the language.

On the positive side, a package insert will probably give the patient better insight into why he is being treated the way he is, and it may give the physician a little bit more time. But it does not remove from the physician the need or obligation to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should be warned of the possibility of serious side reactions—to know what the real dangers are. But it doesn't do a bit of good to indicate that a patient on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that fright engendered by the insert may possibly outweigh the potential good.

ıain purpose of drug information .or the patient is to get his cooperation in following a drug regimen.

Preparation and distribution of patient drug information

We would hope to amass information from physicians, medical societies, the pharmaceutical industry and centers of medical learning. The ultimate responsibility for uniform labeiing must, however, rest with the Food and Drug Administration. There is nothing wrong with this agency saying, "this information is generally agreed upon and therefore it should be used," as long as our process for getting the information is sound.

Distribution of the information is a problem. In great measure it would depend on the medication in question. For example, in the case of an injectable long-acting progesterone, we would think it mandatory to issue two separate leaflets—a short one for the patient to read before getting the first shot and a long one to take home in order to make a decision about continuing therapy. In this case, the information might be put directly on the package and not removable at all. But for a medication like an antihistamine this information might be issued separately, thus giving the physician the option of distribution. This could preserve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

Only the doctor can remove that fear by 20 or 30 minutes of conversation.

I'm not suggesting that we withhold any information from the patient because, first of all, it would be totally dishonest and secondly, it would defeat the very purpose of the insert. I do think that a patient on the birth control pill should know about the incidence of phlebothrombosis.

If you're going to tell a patient the incidence of serious adverse reactions, then you have to tell him that a concerned medical decision was made to use a particular medication in his situation after careful consideration of the incidence of complications or side effects.

Emotionally unstable patients pose a special problem

There are patients who, because of severe emotional problems, could not handle the information contained in a patient package insert. Yet if we are going to have a package insert at all, we just can't have two inserts. I think we might simply have to tell the families of these patients to remove the insert from the package.

Legal implications of the patient package insert

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

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Diabetic Retinopathy: An Overview

Harold W. Skalka, M.D.*

The Extent of the Problem

Although diabetes mellitus is associated with an increased incidence of various ocular problems (cataracts and open angle glaucoma for example), diabetic retinopathy, by virtue of its prevalence and morbidity, is the major culprit in visual loss due to diabetes.

Diabetic retinopathy was the fourth leading cause of new blindness in the United States in 1969 and the third leading cause in 1970.[1] It is probably still moving up as a leading cause of new blindness. In terms of the number of individuals involved, diabetic retinopathy ranks behind senile macular degeneration, cataract and glaucoma as a cause of blindness.

Cataracts and glaucoma are treatable diseases, and proper ophthalmologic care can prevent blindness in patients with glaucoma and cure it in patients blinded by cataracts. Senile macular degeneration, while usually not treatable or preventable, destroys central vision causing legal blindness, but does not lead to total loss of sight (peripheral vision being spared).

Most estimates of the prevalence of diabetes in the population of the United States are in the 1% to 2% range, with the assumption of a perhaps equal number of affected persons who are undetected. Bearing in mind that the percent risk of blindness with duration of diabetes varies in most reported series[2] from 0.1% to 2.1% ten years after diagnosis, to 1.6% to 7.1% with diabetes for 30 years, the magnitude of the problem becomes more apparent.

The diabetic is ten to twenty times more likely to become blind from retinopathy than a nondiabetic from all the other causes of blindness put together, and about 2% of the total diabetic population is blind.[3]

Although there are racial and ethnic differences in the prevalence of diabetes, diabetic retinopathy appears to be rather independent of race or stock. The presence of retinopathy at time of diagnosis of diabetes is practically unheard of in the first decade of life, but rises to about 10% in the seventh decade and then remains fairly constant. It is therefore not a rarity for diabetes to be diagnosed by ophthalmoscopic examination, and then proved by laboratory studies.

If one looks at the percentage of diabetics with retinopathy compared with the duration of their diabetes, one finds that diabetics, whatever their age at diagnosis, have about a 50% chance of having retinopathy after ten to fifteen years duration of their disease, and about a 75% chance after twenty years.[4]

Diabetic retinopathy may be seen across the entire spectrum from a subtle change in the fundus demonstrable only by fluorescein angiography in an asymptomatic individual, to a completely disorganized hemorrhagic and fibrotic posterior segment in a totally sightless eye.

Although the most common course is one of slow, gradual progression, diabetic retinopathy is not an inexorably relentless disease. Anywhere between 8% to 30% of patients with retinopathy may be expected to improve spontaneously if followed for several years.

Diabetic retinopathy may be divided into two categories: background retinopathy and proliferative retinopathy. The incidence of proliferative retinopathy (neovascularization) has increased over the past few decades, as diabetics are living longer. While blindness can, and does occur with background retinopathy, it is far more common in patients with the proliferative form.

Since the retinopathy is an observable manifestation of the microangiopathy occurring throughout the body, albeit in tissues we cannot directly observe, it is not surprising that length of survival decreases statistically as severity of the retinopathy increases. The average life expectancy of a diabetic patient once blindness occurs is about six years.

Diabetic retinopathy is not a preventable disease. Although meticulous metabolic management *may* help retard the onset of retinopathy in the very early stages of the disease (a time, unfortunately, when many diabetics are undiagnosed), it does not appear to significantly affect the progression of retinal changes in the diabetic with well-established retinopathy.

Background Retinopathy

Background, or nonproliferative retinopathy, is the commonest form of diabetic retinopathy, and is by far the form seen most often by the diabetic patient's internist or family physician.

Although changes in retinal veins may be seen early—changes such as dilatation, tortuosity, irregularity of caliber and beading—the retinopathy is basically a microangiopathy. Capillary microaneurysms are an early finding, and are seen as little red dots. These are seen mostly at the posterior pole of the eye, and often are first found on the temporal side of the macula.

They are bulbous dilatations of capillaries, with walls that may be hypercellular, acellular, or have a greatly thickened basement membrane. These microaneurysms are often impossible to distinguish ophthalmoscopically from the smaller "dot and blot" hemorrhages.

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The appearance of a hemorrhage in the retina depends on its size and location, rather than its etiology. Superficial hemorrhages in the nerve fiber layer of the retina become oriented along the course of the nerve fibers, and appear as "splinter" or "flame-shaped" hemorrhages. Hemorrhage from deeper retinal capillaries collects between the vertically-running (perpendicular to the surface of the retina) interneuronal connecting fibers and supporting fibers, forming little "pools" which, when small, look very much like microaneurysms.

"Hard" exudates also tend to collect in the outer layers of the retina, so their shape resembles that of larger "dot and blot" hemorrhages. They contain lipid material, and are probably "edema residues." The abnormal vessels leak fluid into the retina; the "watery" components get reabsorbed more quickly, leaving behind the lipid-like materials. These deposits clear slowly.

Retinal edema, especially in the macular area, is common in diabetic retinopathy, and is often responsible for temporary or permanent visual impairment. Long-standing edema leads to the formation of intraretinal cysts, which, with time and expansion, architecturally destroy retina and lead to irreversible visual loss.

The microangiopathy leads to areas of nonperfusion in the retina. Trypsin digest preparations (which remove the retinal tissue other than blood vessels) show the nonperfused capillaries to be acellular basement membrane tubes. "Soft" exudates or "cotton wool spots" (clinical terms - the corresponding histologic term is cytoid body) are not exudates at all, but represent microinfarcts in the nerve fiber layer, with swelling (and therefore optical clouding) of the nerve fibers in the area of the infarct. The natural history of cotton wool spots is about six weeks long, terminating either with recovery of the nerve fibers or the formation of a tiny, ophthalmoscopically invisible scar. Cotton wool spots represent very small lesions, too small to produce any demonstrable visual field defects.

Most diabetics with cotton wool spots are normotensive. This finding is not pathognomonic of hypertension or collagen-vascular disease, but merely represents a visible consequence of a microvascular abnormality.

Fluorescein angiography is an invaluable aid in studying the retinal vasculature. Fluorescein dye, which fluoresces in cobalt blue light, is rapidly injected as an intravenous bolus, usually in the antecubital vein of the arm, and rapid sequence fundus photographs are obtained through a cobalt filter as the dye courses through the retinal circulation.

With the introduction of fluorescein angiography, it became apparent that the microvascular abnormality is usually more pronounced, and often markedly so, than is apparent ophthalmoscopically. Numerous microaneurysms, nonperfused areas of retina surrounded by dilated shunt capillaries, and areas of leakage from vessels (the normal retinal vessels, like cerebral vessels, do not leak), as well as neovascularization, can often be appreciated only on angiography. A rather modest example of this may be seen in Figs. 1-3.

Hemorrhages may be more extensive and break through preretinally and/or into the vitreous.

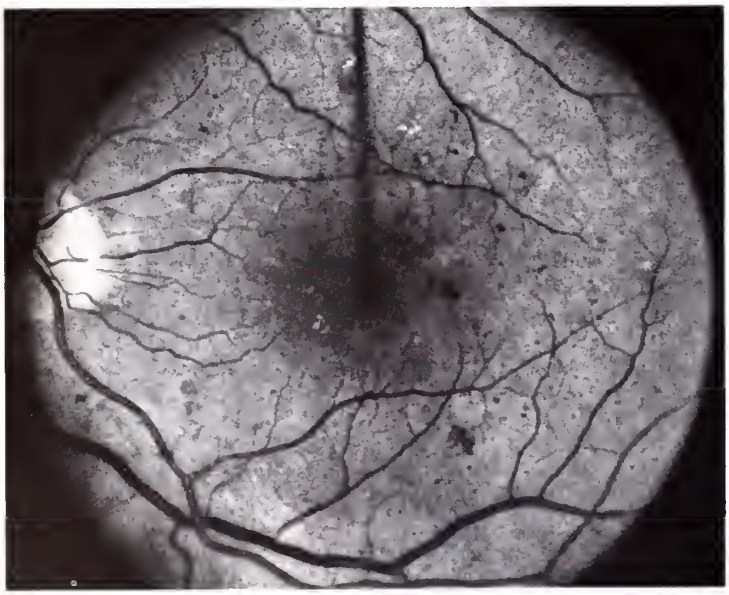


Figure 1—Photograph of macular area showing microaneurysms, small hemorrhages, and small amount of exudate.

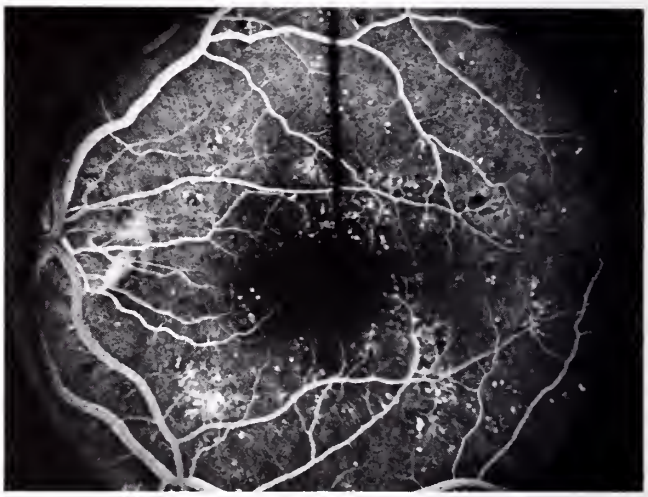


Figure 2—Fluorescein angiogram of same area 18.5 seconds after injection, showing the true extent of the microvascular abnormality.

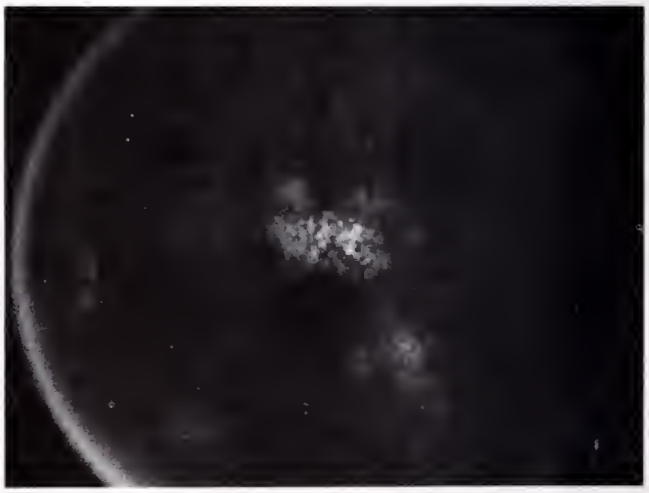


Figure 3—Same area ten minutes after fluorescein injection, showing pooling of fluid that has leaked out of the abnormal blood vessels.

If blindness occurs with background retinopathy, it is usually due to involvement of the macula with hemorrhage, exudate or edema causing reduction of visual acuity to 20/200 or less (legal blindness). As a general rule, background retinopathy is not treated unless it appears to be threatening central (macular) vision.

Proliferative Retinopathy

Although proliferative retinopathy may infrequently be seen in eyes with no discernible background retinopathy, it usually is found in retinas which show marked background changes.

Neovascularization, of which the proliferative form of diabetic retinopathy is an example, appears to be a response to local hypoxia. Anoxia simply causes tissue death and does not stimulate any vascular response. Although a theoretical "vasostimulating" substance has been postulated, the exact nature of the factor stimulating neovasculogenesis in hypoxia is unknown.

Whatever the precise nature of the stimulus, neovascularization in the retina may be found in several conditions where relative tissue hypoxia is present – in sickle cell disease, retrolental fibroplasia, pulseless (Takayasu's) disease, retinal vein occlusions, leukemias, sarcoidosis, post-radiation, etc., but most importantly in diabetic retinopathy.

The new vessels, whether they are growing intraretinally, on the surface of the retina, or into the vitreous cavity, are abnormal. The anomalous nature of these vessels, as far as retinal vasculature is concerned, may be seen with fluorescein angiography – they leak dye profusely, which serves to differentiate them from normal retinal vessels, as well as from dilated and tortuous collaterals.

These vessels always have fibrous tissue associated with them, and neovascularization is really a fibrovascular process. During the early stages of neovascularization, the presence of accompanying fibrous tissue may only be appreciated on histologic sections.

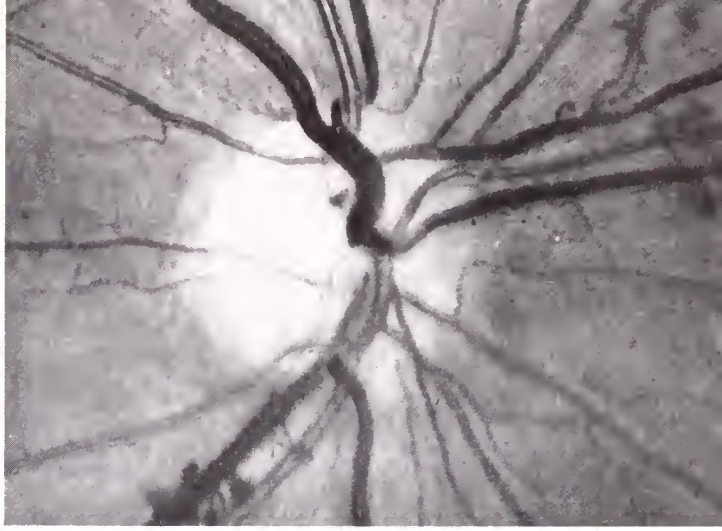
With time, the fibrous tissue element often comes to predominate. Neovascularization, like other manifestations of diabetic retinopathy, has a predilection for the posterior portion of the eye.

The earliest change in proliferative retinopathy is usually a leash of abnormal capillaries in an area where the normal retinal capillaries are damaged or destroyed. These vessels then extend to run on the surface of the retina, along the posterior surface of the vitreous, and sometimes extend into the vitreous. The posterior surface of the vitreous tends to "shrink" forward, putting traction on these vessels, and causing them to rupture and hemorrhage.

New vessel formation on the optic disc is more ominous than that occurring peripherally, as new vessels arising from the disc tend to grow more rapidly and extend further into the vitreous (the internal limiting membrane of the retina is absent over the optic disc, and Wise[5] has suggested this factor as the explanation).

With time, the vascularity of the proliferative tissue decreases, and the fibrotic component becomes more prominent and begins to contract. This often leads to traction detachments of the retina which are difficult or impossible to repair.

Figs. 4-8 illustrate some of the stages of proliferative retinopathy.



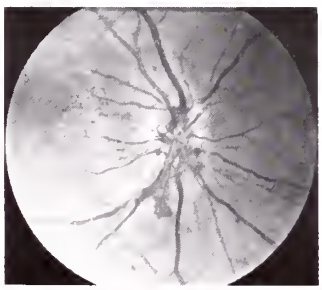


Figure 4–Small tufts of proliferative retinopathy at 2 o'clock and 7 o'clock.

Figure 5–Neovascularization arising on the disc and extending into the vitreous cavity.

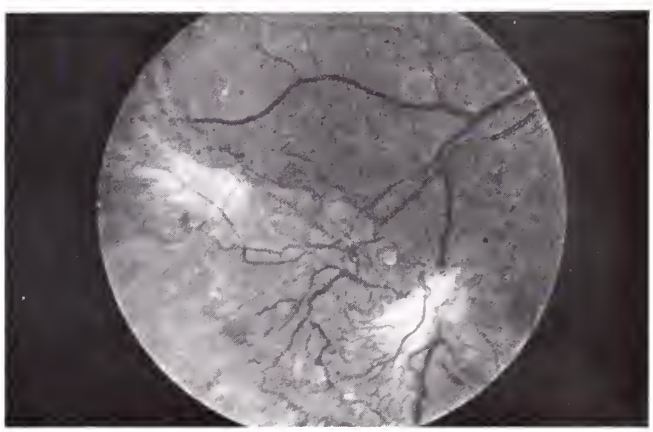


Figure 6–Several areas of fibrovascular proliferation can be seen in the plane of the retina. This neovascularization also extends forward into the vitreous cavity.



Figure 7–More extensive proliferative retinopathy. Fibrous proliferation has invaded and replaced the new vessels. The fibrous tissue extends well into the vitreous cavity. This stage of fibrous proliferation is not amenable to photocoagulation therapy.

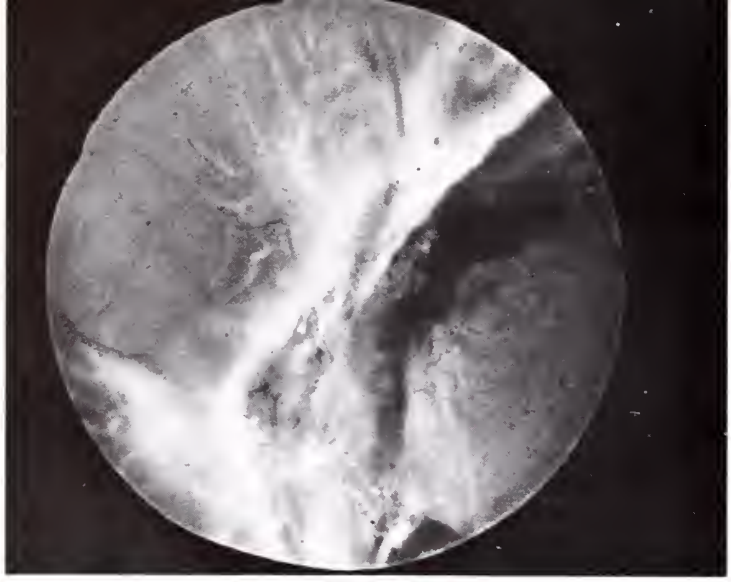


Figure 8—Heavy fibrous proliferation protruding forward from the retina. Vitreal hemorrhage can be seen next to the fibrous proliferative band. The vision in this eye is limited to light perception.

Figure 9—A proliferative tuft of vessels extends into the vitreous. These are small hemorrhages on the surface of the tuft.



While proliferative retinopathy may cause extensive and repeated vitreous hemorrhaging, or fibrotic disorganization of the posterior segment of the eye, it may (as is also true of background retinopathy) appear to improve in the end stages of the disease.

Here, the lack of visible blood, blood products and connective tissue merely represents a largely dead retina, histologically scarred and nearly avascular. This is not spontaneous improvement, but rather involution of vascular supply as a combined result of vascular disease and diminished metabolic requirements.

Treatment

Treatment of diabetic retinopathy is not aimed at effecting a "cure", as this is not possible, but rather is directed toward trying to preserve or restore useful vision for as long as possible.

Many substances have been used in medical attempts at improving diabetic retinopathy. The list would include rutin, vitamins B_{12}, C, E, and K, phenindione, para-aminosalicyclic acid, fructose, testosterone and other anabolic steroids, corn oil, lipotropic agents such as choline and inositol, clofibrate, heparin, coumarin, and low fat diets.

Although the lipotropic substances and low fat diets may help decrease visible exudates in the retina, none of the above listed agents has ever been shown to be at all effective in improving visual acuity.

Pituitary ablation is rarely done anymore in the United States. The morbidity associated with this procedure and the absence of firm data showing it to produce clearly superior results have led to its abandonment.

Photocoagulation is now the standard therapy for eyes with clear media requiring treatment for diabetic retinopathy. Photocoagulation involves the destruction of specific areas of tissue by means of the heat generated by the absorption of high intensity focused light. Initially performed using the xenon-arc photocoagulator of Meyer-Schwickerath, most photocoagulation therapy today is done with the argon laser. The monochromatic light emitted by the argon laser is of the proper wavelength to be absorbed by hemoglobin, making it effective in treating blood vessels.

In general, background retinopathy (microaneurysms, retinal hemorrhages, exudates and retinal edema) is treated only if it is causing visual impairment (macular involvement). Proliferative retinopathy (neovascularization) is treated whenever possible.

There are three basic methods of treating diabetic retinopathy by photocoagulation: 1) treatment of focal pathology (coagulation of "everything that's red" as well as leaking points as demonstrated by fluorescein fundus angiography); 2) treatment of neovascularization by coagulation first of the feeder vessels and then of the neovascular frond; and 3) treatment of hypoxic retina by widespread peripheral retinal photocoagulation.

Hypoxia is felt to be the basic stimulus for retinal neovascularization, and peripheral ablation is aimed at reducing the amount of living retinal tissue, thus reducing metabolic requirements and hopefully relieving the hypoxia.

Photocoagulation is a useful therapeutic modality for the short term. Its efficacy in obtaining long-term improvement is currently being evaluated in a controlled, prospective study being carried out at a number of centers across the country.

Vitreous hemorrhage makes photocoagulation impossible, and fibrosis in the vitreous or along the surface of the retina is not amenable to photocoagulation therapy. Some patients with these heretofore untreatable complications of diabetic retinopathy may now be helped by the relatively new techniques and instrumentation of vitrectomy.

Vitrectomy involves the cutting and removal of opaque vitreous or fibrous tissue deep within the vitreous, replacing volume with a physiologic salt solution. While a hazardous procedure requiring specialized expertise and technology, exciting advances are being made which hold promise for the future.

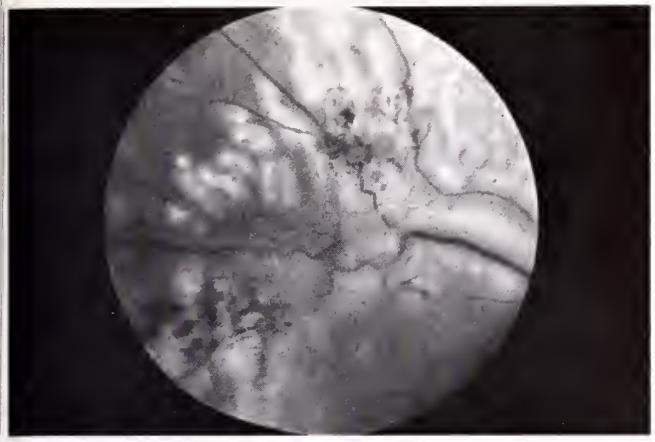


Figure 10—Twenty-four hours after argon laser photocoagulation, fragmentation of the vascular tufts can be seen.

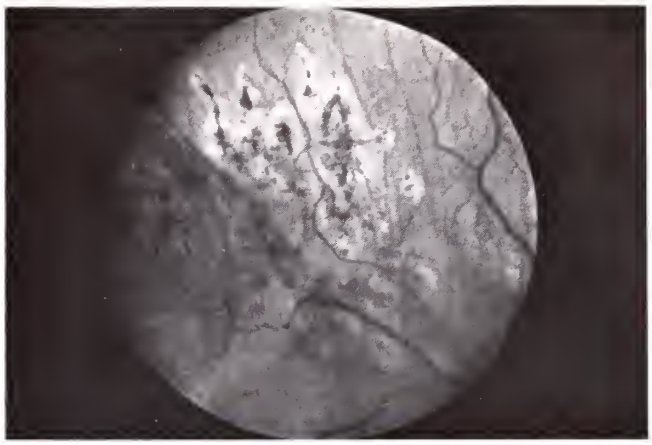


Figure 11—The same area three weeks after argon laser photocoagulation. Pigmentation of the underlying retina (scarring from the photocoagulation burns) and complete obliteration of the vascular tuft can be seen.

At the present time, treatment of diabetic retinopathy is essentially destructive — the burning or removal of parts of the interior of the eye. Future advances in this field will hopefully encompass preventive or regenerative measures, perhaps with application beyond the eye.

CREDITS

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Antenatal Diagnosis Of Genetic Defects

W. Wertelecki, M.D.*

Antenatal diagnosis of birth defects and hereditary disorders has become an area of vigorous activity in Medical Genetics. Since Medical Cytogenetics itself is barely over a decade old, it is not surprising that many colleagues are hesitant to base decisions on these new techniques of diagnosis. Therefore, it seems appropriate to direct some of our efforts to disseminate, update and give perspective to the role that Departments of Medical Genetics play in this important emerging clinical area.

In addition, there has been some attention given to antenatal diagnosis by the media and this has generated some misconceptions and social pressures which must be dealt with by the physician.

For instance, antenatal diagnosis is almost invariably regarded as an activity contributing to an increase of therapeutic abortions. However, it can be argued from existing data that antenatal diagnosis tends to conserve pregnancies. While before, many couples receiving genetic counseling were offered a simple calculation of risk of recurrence, now, they can be reassured about the normality of the fetus.

In the case of women at risk of producing a child with Down's syndrome, it was usual for couples to opt for an abortion. Now, the vast majority remain pregnant, once reassured of the normal chromosomal constitution of the fetus.

While the frequency of congenital defects of man remains a major cause of pediatric deaths, a rapidly increasing number of human defects can be diagnosed antenatally. This is accomplished by techniques previously developed in cytogenetics, biochemistry, and, more recently, ultrasonography and fiberoptics.

Numerically, the search for fetal chromosomal defects is the most common reason leading to studies of amniotic fluid cells. This is not surprising since chromosomal abnormalities are exceedingly frequent in early spontaneous abortions (– 50%) and quite frequent in neonates (1:200) (See Table 1).

Although on this basis alone, antenatal cytogenetic studies of unselected pregnancies would detect cytogenetic aberrations, such an approach is not feasible and, perhaps, even undesirable. It is well recognized, however, that with increasing maternal age, the risk for fetal cytogenetic defects increases sharply.

The association of Down's syndrome with advanced maternal age is well known to the public and constitutes the major basis of requests for antenatal studies. It is less known that the association of advanced maternal age to chromosomal abnormalities is also present in the case of spontaneous abortions and defects other than Trisomy 21 (See Tables 2 and 3).

Table 1. Chromosomal Aberrations in the Perinatal Period

	Per 1,000 Pregnancies	Source
Random induced abortions	12	Susaki, et al 1
Spontaneous abortions	720	Boue, et al 2
Amniocentesis	2-136	Results reflect the composition of maternal samples. 3-5
"Normal" newborns	4-5	Surveys of consecutive births. 6,7

Table 2. Cytogenetics and Maternal Age in Spontaneous Abortions[2]

Karyotype	Mean Maternal Age (yrs.)
Normal	27.5
Trisomy G	33.2
Double Trisomy	35.0

Table 3. Chromosomal Aberrations in Neonates vs. Maternal Age (Per 1,000 Pregnancies)

Maternal Age Yrs.	Survey of Newborns[6,7]	Down's Syndrome[8]
-- 29	0.4	0.29
30 - 34	0.2	1.72
35 - 39	1.4	3.52
40 - 44	1.6	14.18
45 --	---	26.32

In the case of our state, only 4% of deliveries are by mothers of 35 years of age or older, yet among this 4%, is a disproportionate number of cytogenetically defective neonates. It can be estimated that this 4% of mothers produced 40% of children with Down's syndrome and 20% of those born with other chromosomal defects during the year of 1974 (See Table 4).

Consequently, if antenatal cytogenetic studies were offered to the 2,500 pregnant women of 35 years of age or older, approximately 20 fetuses affected by malformation syndromes due to cytogenetic aberrations could be detected.

Besides advanced maternal age, other indications for antenatal cytogenetic studies relate to a previous occurrence of a chromosomally defective child as is the case of young couples with a child who has Down's syndrome. The risk for a chromosomally normal couple who had a child with Trisomy 21 of having another similarly affected child is greater than for the general population.

It has been estimated that for a mother under 25 years of age, the risk is 50 times greater.[9] A study by Uchida in Manitoba has shown a risk of 1:57 while antenatal studies place the risk at approximately 1:100.[10, 5]

It is insufficiently recognized that 5% of children with

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Table 4. Chromosomal Aberrations in Newborns

Maternal Age(Yrs.)	Alabama, 1974 Total Newborns	Estimated Newborns with Cytogenetic Aberrations(*)	Estimated Newborns with Down's Syndrome(*)	Massachusetts (1954-1965)[5] Total Newborns	Down's Syndrome (*)
< 35	56,647	17 (0.03)	24 (0.04)	---	---
35 and >	2,508	4 (0.16)	16 (1.0)	8,910	54 (1.0)

(*) Percentage

Down's syndrome result from a translocation of a chromosome 21, most frequent to a D or G chromosome. The chromosomal translocation of such children in 50% of the cases is inherited from a carrier parent. This is the reason why chromosomal studies must be performed on all patients with Down's syndrome in search of a possible chromosomal translocation.

The documentation of the translocation in a patient must be followed by studies of the parents. Given the presence of a chromosomal translocation in either parent, such individuals are at a 20 to 100% risk of producing additional affected children.

In the past, most couples aware of such a predicament abstained from having additional children, while now, such couples can benefit from antenatal studies and, once reassured of the chromosomal normality of the fetus, accomplish their reproductive goals.

It is useful to remember that any parent, unknowingly, may be a carrier of any of a variety of chromosomal translocations. Such parents may be phenotypically normal since many chromosomal translocations are balanced in the sense that the genetic material missing from one chromosome is present in another.

However, during meiosis, in most types of chromosomal translocations, such parent will produce approximately 25% of gametes devoid of the translocated segment and similar proportions of gametes will contain extra translocated chromosomal material.

For example, a parent having a D/D translocation, will produce gametes with a D/D chromosome which is equivalent to two D chromosomes. If fertilization takes place, the fetus will suffer from Trisomy D syndrome. The family history is a powerful tool which a clinician should utilize routinely when assisting couples seeking antenatal diagnosis.

In the case of familial balanced chromosomal translocations, the pedigree will frequently reveal either sterility, multiple abortions, malformed stillborns or delivery of dysmorphic newborns either in the sibship under consideration or in more distant relatives. Furthermore, an increasing number of reports document the tendency for diverse cytogenetic defects to cluster in sibships and families.[11]

Studies of successive human abortions reveal that women whose first abortion was chromosomally abnormal were more likely to reveal cytogenetic aberrations in subsequent abortions.[12] The selected pedigrees presented in Figure 1 illustrate the concurrence in sibships of abortions and Trisomy 21, 13, 18, XXY and XXX. The clustering tendency seems to persist even if the mother remarries, as shown by the last 3 pedigrees. Therefore, it is prudent to consider antenatal cytogenetic studies in families with abnormal reproductive histories.

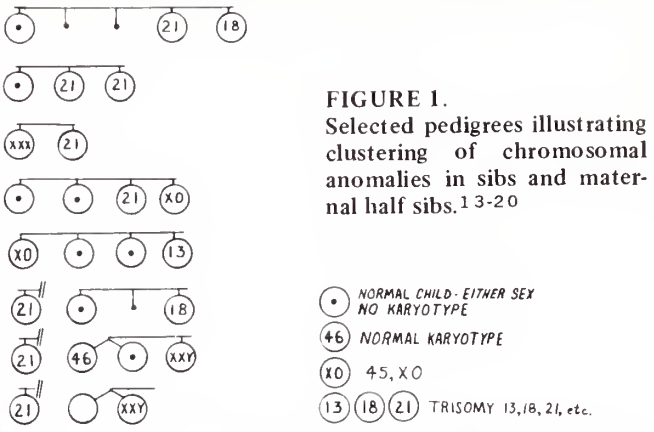


FIGURE 1.
Selected pedigrees illustrating clustering of chromosomal anomalies in sibs and maternal half sibs.[13-20]

We have discussed the major indications for cytogenetic antenatal studies shown in Table 5. The results generated by different series of antenatal cytogenetic studies support these criteria. As shown in Table 6, antenatal studies on the average detect cytogenetically defective fetuses in about 2.25% of cases of advanced maternal age, 1.2% in mothers who had a previous child with Down's syndrome and in 23% when a parent had a chromosomal translocation.

Other possible reasons for cytogenetic antenatal studies listed in Table 5 are less clearly justifiable. Exposure to drugs such as LSD, immunosuppressive agents, etc., or radiation frequently precipitates the request for antenatal chromosomal studies. However, fetal malformation due to teratogens may occur in the presence of a normal karyotype.

In most instances, the available data concerning teratogens is insufficient to support firm recommendations. Many parents are already inclined to request a therapeutic abortion, while others prefer to retain the pregnancy. In either case, we feel that a full discussion of such situations is beneficial to the family.

Whatever the decision, with or without antenatal studies, a frank interaction between the physician and the parents is useful to the family facing a potentially catastrophic event.

Another major area of acticity in antenatal diagnosis

Table 5. Most Common Indications for Consideration of Antenatal Cytogenetic Studies

Advanced Maternal Age	Family History of "Mongolism"
Previous Trisomy 21	Habitual Abortions
Translocation Carriers	Previous Children with Multiple Congenital Anomalies
Previous Trisomy 18, 13, Other	Family History of Mental Retardation
Abnormal Parental Karyotype	Exposure to Teratogens (X-rays, Drugs, etc.)
	Parental Anxiety

Table 6. Experience from Amniocentesis for Cytogenetic Antenatal Diagnosis

Indication	Cytogenetic Fetal Defects (*) Series A[3]	Series B[5]	Series C[4]
Advanced Maternal Age	5:115 (4.0)	14:650 (2.0)	5:303 (2.0)
Previous Child with Down's Syndrome	3:69 (4.0)	5:504 (1.0)	0:99 (0)
Chromosomal Translocation in Parent	12.38 (32.0)	17:94 (18.0)	3.10 (30.0)

(*) Percentage

relates to the detection of hereditary biochemical disorders of metabolism. In the last decade we have witnessed an enormous progress in somatic cell genetics. Much has been accomplished through the incorporation of *in vitro* studies of human fibroblasts which retain in successive generations many of their enzymatic properties. The progress made from clinically defining a metabolic disorder to demonstrating specific defects in cultured cells has allowed for the incorporation of similar techniques antenatally.

Although defects of metabolism may be manifested in uncultured amniotic fluid cells or the amniotic fluid, with few exceptions, such studies are too unreliable to be used for antenatal diagnosis. Therefore, the diagnosis rests primarily on the accummulation of storage substances or enzymatic abnormalities of amniotic cells in culture. Inherited biochemical disorders are estimated to occure in 1:100 live births.[21]

However, the array of metabolic defects of man is vast and, individually, most types of inborn errors of metabolism are rare. Relatedly, the scope of assays which can be performed by any given laboratory is limited.

This highly specialized activity and the required proficiency for the detection of inborn errors of metabolism have resulted in the emergence of laboratories specializing in selected disorders. The prevalent procedure is to shop fresh or cultured amniotic fluid cells to selected facilities.

It is unfortunate that most couples request antenatal studies for the detection of metabolic defects because of the existence of an affected child. Most metabolic disorders result from autosomal recessive mutations and, therefore, unless nonpaternity is a consideration, have a recurrence risk of 25% for any future fetus.

If carriers of the particular disorder under consideration, manifest abnormal enzymatic assays, it may be difficult to distinguish an affected fetus from one who is merely a carrier. The number of metabolic defects amenable to antenatal detection is rapidly expanding and Table 7 shows

Table 7. Partial Listing of Prevalent Hereditary Biochemical Disorders of Metabolism Studied Antenatally[22]

Pompe's Disease	Gaucher's Diseases
Mucopolysaccharidoses	Galactosemia
Branched Chain Amino Acid Disease	Tay-Sach's Disease
Niemann-Pick Disease	Metachromatic Leukodystrophy
Cystinosis	Other

some of the most prevalent disorders currently diagnosed antenatally.[22]

Whenever antenatal studies are initiated in search of metabolic defects, it is useful to consider whether the amniotic fluid cells should also undergo concurrent cytogenetic analysis in view of the significant frequency of chromosomal defects in early gestational periods.

We can now address the question of X-linked disorders where antenatal detection is not possible through cytogenetic or biochemical studies. The McKusick's catalog of hereditary disorders includes some 60 pages of X-linked disorders of man.

Although many X-linked disorders are not so serious as to justify a therapeutic abortion, the examples shown in

Table 8. Partial Listing of Selected X-Linked Disorders

Agammaglobulinemia (Brutton - Swiss Types)
Wiscott-Aldrich Syndrome
X-Linked Muscular Dystrophies*
Hemophilia A (Factor VIII)*
Hemophilia B (Factor IX)*
Chronic Granulomatous Disease*
Lesch-Nyhan Syndrome†
Lowe's Syndrome
Hunters Syndrome†
Fabry's Disease†
Other X-Linked Disorders

*Carrier state of the mother can be determined.

†An affected male fetus can be distinguished from an unaffected male fetus.

Table 8 include disorders of tragic proportions. A mother who is a carrier of an X-linked recessive gene, is not affected because of the presence of a normal allele on her other X chromosome. Her daughters will inherit either one of the X chromosomes and a paternal X chromosome. Therefore, on the average, 50% of the daughters will be carriers while the remainder will be normal.

In the case of sons who inherit the paternal Y chromosome, 50% will inherit and manifest the genetic mutation transmitted by one of the mother's maternal X chromosomes.

While a positive family history of affected maternal male relatives strongly argues that the mother is a carrier, not infrequently, the family history is negative. Because "de novo" mutations are known to occur, it is useful to determine whether the mother is herself a carrier of the X-linked trait.

Unfortunately, it is possible to document the carrier state of X-linked disorders in women with affected children in only a limited number of X-linked traits. Lacking available antenatal diagnostic tests for X-linked disorders, the determination of fetal sex has been used as a substitute for an accurate diagnosis. The rationale is that if the fetus is a male, it may be affected, while, if it is a female, it will not express an X-linked recessive disorder.

Fetal sexing is easily and accurately established by cytologic examination of amniotic cells for sex-chromatin and fluorescent Y-bodies. Further confirmation of fetal sex is obtained from cytogenetic analysis of amniotic cell cultures.

The drawback of this approach is obvious. Given a male fetus, on the average, 50% will be affected while the remainder will inherit the maternal X chromosome free of the mutation. Therapeutic abortions of male fetuses will, therefore, include equal proportions of normal and abnormal fetuses which has raised valid questions about such an approach.

Finally, a number of human structural defects can be detected antenatally through ultrasonography, measurement of alpha-fetoprotein in amniotic fluid and direct inspection of the fetus.

Spina bifida and anencepahly are related defects and notorious for contributing heavily to infant morbidity and mortality. The frequency of these anomalies varies greatly

from region to region, but in the nearest survey to Alabama (Charleston, South Carolina), the frequency of anencephaly and spina bifida with an externally visible sac is at least 2.1:1,000 births.[23]

The recurrence risk of these anomalies increases sharply somewhat in proportion to the number of affected relatives. The detection of anencephaly is feasible after the 14th week of gestation, when ultrasonography allows for an accurate assessment of fetal cephalic development.

A woman at risk of producing a fetus with anencephaly is also at risk of producing children with spina bifida and vice versa. In the case of fetuses with open defects of the neural tube, the levels of amniotic fluid alpha-fetoprotein are elevated.

There is emerging evidence that elevated alpha-fetoprotein levels can be detected in the maternal circulation. With further developments, such method would allow for screening of large populations of pregnant women. Therefore, ultrasonography should be followed by amniocentesis and determination of amniotic fluid levels of alpha-fetoprotein.

The level of alpha-fetoprotein in amniotic fluid varies with gestational age and ultrasonography has the additional advantage of adding valuable information toward the assessment of the gestational age. Once again, if amniotic fluid is obtained for study of alpha-fetoprotein, consideration must be given to whether concurrent cytogenetic studies should be undertaken.

In addition, it can be expected that further developments in the technology of fiberoptics and fetoscopes will result in a greater role of direct fetal inspection for the purpose of antenatal diagnosis. Many disorders, including some of autosomal dominant inheritance, can, so far, only be diagnosed antenatally by direct inspection of a fetus. (See Table 9).

Table 9. Examples of Malformation Syndromes Amenable to Antenatal Detection through the Utilization of Ultrasonography, Fetoscopy and Roentgenograms

Microcephaly	Facial Clefts
Anencephaly-Spina bifida	Treacher Collins
Beckwith-Wideman Syndrome (Omphalocele-Macroglossia)	Limb Anomalies
	Other

At this point, Dr. H. Mendenhall, as head of Obstetrics, will summarize the major considerations concerning amniocentesis and the use of ultrasonography:

Most antenatal diagnostic studies are performed on cultured amniotic fluid cells. Therefore, the timing of amniocentesis should optimize the likelihood of obtaining sufficient amniotic cells and its performance be early enough to allow for a therapeutic abortion, if indicated. It has been shown that the volume of amniotic fluid doubles between the 14th and 20th weeks of gestation.

On this basis, as well as other reasons which will not be discussed at this time, the consensus of opinion is to perform amniocentesis at approximately the 16th - 17th week of gestation. The amniotic fluid specimen should be free of red cells and be promptly processed by the laboratory since the viability of amniotic fluid cells is known to be compromised by these factors.

Amniocentesis, in most instances, is best accomplished by the patient presenting herself to the institution where

Table 10. Complications Resulting from Amniocentesis

Fetal	Maternal
Death	Hemorrhage
Fetal Puncture	Premature Labor
Fetal Hemorrhage	Peritonitis
Amniotic Fluid Leak	Rh Isoimmunization
Infections	
Abruptio Placentae	

the fluid will be analyzed and undergoing amniocentesis with ultrasonographic assistance. With B-mode ultrasonography, the obstetrician responsible for doing the amniocentesis can accurately localize the placenta, visualize the fetus, and determine the site of puncture least likely to traverse the placenta or traumatize the fetus.

In our institution the technique is quite simple; the puncture site is decided upon with an ultrasound scan, the skin is prepped as for a venipuncture, and a 20 ml. plastic syringe is attached to a one and one half inch 21 gauge moderate beveled needle.

No anesthesia is used and the needle is thrust decisively into the marked site. On occasion, a two inch or longer 20 gauge needle with stylet is required if the abdominal wall is excessively thick.

From our point of view, whenever a decision is made to assess a developing conceptus through amniotic cell studies, it is essential that the patient, the geneticist, the referring physician, and the obstetrician performing the tap be aware of the possible complications from the procedure.

These risks are minimized by the relatively large volume of amniotic fluid in relation to mass of the fetus present at the 16th week of gestation and by accurate placental and fluid localization with ultrasound.

The risks are real and in approximately 1% of instances, complications do occur. (See Table 10). However, a full and accurate knowledge of the long and short term risks to the fetus are not known at this time.

Ultrasonography is of value not only in localizing the placenta, but in dating the gestation (by serial studies if necessary,) in detecting various congenital anomalies including meningomyelocele, anencephaly, and polycystic kidneys; in determining fetal position in the presence of multiple gestations; and in investigation of suspected missed abortion, retained tissue, and fetal demise. (See Table 11).

The ultrasonographic equipment in our institution was granted by The National Foundation and is located adjacent to the labor and delivery area which has added greatly to our capability to assess pregnancies in early and late stages.

Immediately after the arrival of a specimen in the Medical Genetics Laboratory, cell cultures are initiated. The coordination between ultrasonography, amniocentesis and the laboratory is highly beneficial in optimizing the results. The viability of amniotic cells, if inadequate, can be

Table 11. Benefits from Ultrasonography

Placental - fetal localization
Detection of twin pregnancies
Detection of: anencephaly, spina bifida, polycystic kidneys, fetal demise, etc.

suspected within the first week of culture. Otherwise, after two to four weeks of culture, the cells are amenable to cytogenetic or other types of studies.

Cytogenetic studies are performed using banding techniques exclusively. Although this adds 24 to 48 hours to the procedure, the sensitivity of the analysis is sharply incremented when compared to earlier methods. A preliminary report is telephoned to the patient's physician, followed within 24 to 72 hours by a final report.

We have briefly outlined the most frequent reasons leading to antenatal studies. As shown in Table 12, antenatal studies are not merely an array of laboratory procedures, but rather a complex series of steps requiring proficiency in diverse clinical areas.

Although many couples are identified by their physicians as being at risk of producing a defective child, a substantial proportion of couples request antenatal studies on their own initiative. The evaluation of couples requesting antenatal diagnosis requires a full assessment of the family background, reproductive history, examination of affected relatives, scrutinization of hospital and autopsy records, and interpretation of the genetic implications of the disorders under consideration.

In addition, the reproductive aspirations, fears, misconceptions, understanding of the risk and implications of producing an affected offspring, risks related to amniocentesis and possible procedural pitfalls must be dealt with. Essentially, the procedure does not differ from genetic counseling although it is frequently more stressful, complex, differs from case to case, and requires substantial amounts of time.

Genetic counseling should be initiated prior to the onset of pregnancy. If otherwise, the genetic evaluation should begin as early as possible.

All too often, couples at risk are referred after the first trimester of gestation because it is considered that amniocentesis is impractical in earlier stages of gestation. It is natural for a couple who had a defective child to ask the question, "Will it happen again?". Such couples are likely to benefit from genetic counseling regardless of whether the disorder concerning them is or is not amenable to antenatal detection.

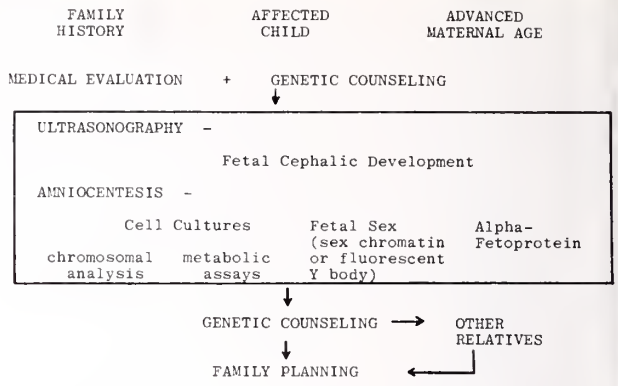
As shown in Table 12, genetic counseling should also take place after completion of antenatal studies regardless of the results. The reproductive risk is unaltered by earlier antenatal studies and consideration should be given to family planning and to other relatives who may be unaware that they share similar risks.

The role of genetic counseling does not include the recommendation of courses of action. The role is to optimize the understanding of the alternatives available to the family.

Successful genetic counseling, in out judgment, aside from representing an important element of preventive medicine and family planning, should also contribute to the preservation of the family which frequently breaks up after a catastrophic event such as the birth of a severely handicapped child. We detect that such families feel isolated and bewildered by the frequently conflicting information they receive.

Alabama is among a minority of states in the Union where it should be relatively easy to develop a strong

Table 12.



program in the area of antenatal detection of human defects. Because of Alabama's size and with laboratories in Mobile and Birmingham, it seems justified to attempt to reach and inform the population at risk of producing defective children amenable to antenatal detection. The most obvious groups at risk are women older than 35 years of age and those who have produced children with Down's syndrome, spina bifida, or anencephaly.

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Physician Requirements For Alabama—Relationship To The New HSA's

William F. Bridgers, M.D.*

The citizens of the State perceive there is a shortage of physicians. The Alabama Comprehensive Health Planning Administration and the Schools of Medicine agree with this qualitative notion. It would prove very useful if some concensus could also be reached on the quantitative magnitude of the shortage, because it is only by comparing the (area by area, specialty by specialty) requirements with the State's capabilities to supply additional physician manpower (of the proper kind to the proper places) that it can be determined which gaps will be bridged, and which may not, at least without some new efforts.

Several new initiatives are already underway; the Schools of Medicine are rapidly increasing their class sizes[1]; new residency programs to accommodate the new graduates are being planned, especially emphasizing primary care specialties[2]; a new phase in the Federal government's attempts to assist in evolution of a system of care is underway via PL 93-641, creating Health Service Areas and Health Systems Agencies. This latter effort is of very great importance because of its possible impact upon health services on a regional basis, and reference to it will be made later in this paper.

However, whether or not, and when, these efforts will lead to the ultimate goal (equitable access to care of high quality at a reasonable cost) depends upon knowing what this goal, in fact, requires with respect to physician manpower. All evolving systems of care which do not take into account that physicians are the *sine qua non* are going to fail.

Projections of the requirements for physicians are only approximations with many pitfalls, as discussed in depth in a recent paper[3]. Nonetheless, for the reasons stated above the effort must be made, and as new information and technologies become available, the projections must be updated. The purpose of this paper is to examine the currently available estimates of the State's physician requirements and to suggest certain revisions, in an attempt to focus upon the major problem areas.

Two estimates of the requirements for physicians in the State have recently been advanced. The Alabama Comprehensive Health Planning Administration conducted a survey of approximately ten per cent of the State's physicians, including the presidents of all county medical societies. This yielded a measure of the providers' goals by county and by specialty, as they perceived the needs in late 1974.*

The other recent study was carried out by the author.* This method was based upon an estimate that one access physician** is necessary for every 2,000 population, and that 45 consultant and professional service physicians are required for every 55 access physicians, distributed geographically in counties on the basis of population densities.

TABLE I

COUNTY GROUP
0-25,000 POPULATION

COUNTY	CHP GOALS			BRIDGERS ESTIMATE OF REQUIREMENTS		
	ACCESS	OTHERS	TOTAL	ACCESS	OTHERS	TO
Autauga	9	2	11	12	10	
Barbour	11	4	15	11	7	
Bibb	4	1	5	7	0	
Bullock	4	1	5	6	3	
Butler	11	3	14	11	6	
Cherokee	6	2	8	8	0	
Choctaw	6	1	7	8	0	
Clay	6	1	7	6	0	
Cleburne	4	1	5	6	2	
Conecuh	4	1	5	8	3	
Coosa	2	0	2	5	0	
Crenshaw	9	1	10	7	0	
Fayette	6	3	9	8	3	
Franklin	14	5	19	16	6	
Geneva	7	0	7	12	5	
Greene	4	0	4	6	2	
Hale	6	0	6	8	2	
Henry	5	0	5	6	4	
Lamar	5	0	5	7	0	
Lowndes	6	0	6	7	0	
Macon	15	9	24	13	8	
Marengo	12	4	16	13	7	
Marion	9	2	11	13	5	
Monroe	9	5	14	10	4	
Perry	6	1	7	8	3	
Pickens	9	1	10	11	2	
Randolph	9	4	13	9	4	
Sumter	7	2	9	9	2	
Washington	6	1	7	8	0	
Wilcox	7	1	8	8	0	
Winston	5	1	6	8	3	
TOTAL	223	57	280	275	91	3(

These two studies present perceptions of the State's requirements for physicians as viewed by the providers of the care and by an academician. Before a comparison of the two is presented, it may be important to point up a study which has *not* been carried out: what about the recipients of the care?

*Special Assistant to the Vice President for Health Affairs, University of Alabama in Birmingham, The Medical Center.

*The details of the assumptions and calculations, and full definitions of terms, may be found in:

—Physician Manpower Study Phase II: Assessment of Need, supplementary report No. 6, published by the Alabama Comprehensive Health Planning Administration, Montgomery, December, 1974.

—W. F. Bridgers, "Alabama's Physician Shortage - An Estimate of its Size and Distribution by County and by Specialty Groups," Alabama Journal of Medical Science 12 280 (1975).

**The term assess physician is employed instead of primary or generaly care in order to emphasize that these physicians dispense "first contact" care. The access physician is the patient's personal and sustained entry point into the health care system. The following classification is employed: access physicians (general and family practitioners, general internists, pediatricians, and obstetrition-gynecologists); consultant physicians (all surgeons, internal medical subspecialists, dermatologists, psychiatrists, and neurologists); professional services physicians (anesthesiologists, radiologists, and pathologists). Surgeons are not included as access physicians, despite the likelihood that they currently dispense primary care, because this is likely to be increasingly less true in the future.

TABLE II COUNTY GROUP 25-50,000 POPULATION

COUNTY	CHP GOALS ACCESS	CHP GOALS OTHERS	CHP GOALS TOTAL	BRIDGERS ESTIMATES OF REQUIREMENTS ACCESS	BRIDGERS ESTIMATES OF REQUIREMENTS OTHERS	BRIDGERS ESTIMATES OF REQUIREMENTS TOTAL
Blount	8	0	8	13	3	16
Chambers	17	13	30	18	12	30
Chilton	8	0	8	14	4	18
Clarke	10	5	15	13	7	20
Coffee	20	14	34	17	15	32
Colbert	26	23	49	24	21	45
Covington	24	12	36	17	14	31
DeKalb	19	7	26	21	6	27
Elmore	20	9	29	17	5	22
Escambia	20	11	31	18	11	29
Jackson	23	11	34	20	9	29
Lawrence	11	2	13	14	0	14
Limestone	14	4	18	22	10	32
Pike	13	12	25	13	10	23
Russell	20	12	32	22	18	40
St. Clair	5	0	5	13	4	17
Shelby	11	7	18	20	5	25
Tallapoosa	21	15	36	17	12	29
TOTAL	290	157	447	313	166	479

TABLE III COUNTY GROUP 50-100,000 POPULATION

COUNTY	CHP GOALS ACCESS	CHP GOALS OTHERS	CHP GOALS TOTAL	BRIDGERS ESTIMATES OF REQUIREMENTS ACCESS	BRIDGERS ESTIMATES OF REQUIREMENTS OTHERS	BRIDGERS ESTIMATES OF REQUIREMENTS TOTAL
Baldwin	27	9	36	30	12	42
Cullman	19	13	32	26	9	35
Dale	9	3	12	26	24	50
Dallas	30	44	74	28	20	48
Etowah	54	63	117	47	49	96
Houston	35	52	87	28	27	55
Lauderdale	44	46	90	35	25	60
Lee	31	30	61	30	30	60
Marshall	30	9	39	28	31	59
Morgan	50	40	90	38	33	71
Talladega	39	25	64	33	25	58
Walker	33	19	52	27	10	37
TOTAL	401	353	754	376	295	671

TABLE IV COUNTY GROUP 100,000 POPULATION

COUNTY	CHP GOALS ACCESS	CHP GOALS OTHERS	CHP GOALS TOTAL	BRIDGERS ESTIMATES ON REQUIREMENTS ACCESS	BRIDGERS ESTIMATES ON REQUIREMENTS OTHERS	BRIDGERS ESTIMATES ON REQUIREMENTS TOTAL
Calhoun	50	47	97	53	48	101
Jefferson	419	525	944	323	410	733
Madison	105	93	198	93	65	158
Mobile	167	207	374	159	188	347
Montgomery	105	142	247	84	101	185
Tuscaloosa	62	79	141	59	62	121
TOTAL	908	1,093	2,001	771	874	1,645

TABLE V NUMBER OF COUNTIES, COMPARING CHP'S GOALS WITH BRIDGERS' ESTIMATES OF REQUIREMENTS

COUNTY GROUP	TOTAL PHYSICIANS CHP'S GOAL HIGHER	TOTAL PHYSICIANS CHP'S GOAL THE SAME	TOTAL PHYSICIANS CHP'S GOAL LOWER	ACCESS PHYSICIANS CHP'S GOAL HIGHER	ACCESS PHYSICIANS CHP'S GOAL THE SAME	ACCESS PHYSICIANS CHP'S GOAL LOWER	ALL OTHER PHYSICIANS CHP'S GOAL HIGHER	ALL OTHER PHYSICIANS CHP'S GOAL THE SAME	ALL OTHER PHYSICIANS CHP'S GOAL LOWER
0-25,000 (N=31)	3 9.7%	4 12.9%	24 77.4%	2 6.5%	4 12.9%	25 80.6%	9 29.0%	6 19.4%	16 51.6%
25-50,000 (N=18)	8 44.4%	1 5.6%	9 50.0%	7 38.9%	1 5.6%	10 55.6%	9 50.0%	1 5.6%	8 44.4%
50-100,000 (N=12)	8 66.7%	0 0%	4 33.3%	9 75.0%	0 0%	3 25.0%	7 58.3%	2 16.7%	3 25.0%
100-645,000 (N=6)	5 83.3%	0 0%	1 16.7%	5 83.3%	0 0%	1 16.7%	5 83.3%	0 0%	1 16.7%
STATE TOTALS	24 35.8%	5 7.5%	38 56.7%	23 34.3%	5 7.5%	39 58.2%	30 44.8%	9 13.4%	28 41.8%

Some quantitation of the consumer's perceptions of needs woulc certainly be useful, because ultimately everyone's input will be required to reconcile conflicting views, if a workable medical care system is to evolve. Of course, in qualitative terms the consumers have made their view clear: they desire timely and equitable access to care of high quality at a reasonable cost.

Their appetites for health care are very large (some believe insatiable is the most appropriate description), and this it can be assumed that a study of needs for physicians as perceived by the potential recipients of the care would show a requirement at least as great as that estimated by the two studies under discussion here.

The two published methods yielded estimates of the aggregate deficit which were very similar (650 to 850 physicians). However, this agreement on the magnitude of the overall deficit masks a significant difference between the two: the CHP's estimate of requirements for physicians in the sparsely populated areas are very much smaller than those estimated by the Bridgers method, and exactly the converse is the case for the heavily urbanized counties.

Tables I - IV illustrate these differences by showing the estimates by each method for counties grouped by population. The differences are especially striking because of the high degree of consistency within each county group (Table V).

There may be some basis for these differences which, if understood, might lead to a yet more precise estimate of needs for physicians. First, consider the possible reason why the poll of physicians in the smallest counties yielded a perceived need for physicians which was much smaller than that calculated by the other method. These physicians probably took into account the "effective demand" of the local population.

That is, allowance was probably made for the patterns of care as they currently exist whereby many individuals residing in these areas seek their medical care elsewhere in nearby urban areas; some don't seek care at all, at least on a regular basis; some are unable to pay for the care required. All of these factors would tend to reduce an estimate of additional physician needs as viewed by the physicians currently in practice in these areas.

The other method assumes that access care for all should be available locally (specifically, the patients do not desire to travel more than about 20 minutes to obtain care), and that lack of financial resources was not an impediment to seeking or obtaining care (recognizing that this is certainly

not a reality at this time but that there is a strong likelihood that it will be true with the advent of national health insurance).

These assumptions tend to discount existing effective demand and therefore lead to a projection for numbers of physicians in the small counties which is higher than by the other method.

Some of the same reasoning in reverse may explain why the CHP estimates in the more populous counties were greater, and in some cases very much greater, than those of Bridgers. In these areas the polled physicians were recognizing the current situation noted earlier where primary health care is dispensed in the larger cities to many who reside elsewhere. Under the assumption that enough physicians were available locally in the same counties this activity would diminish, hence reducing the demand upon the physicians in the heavily populated counties.

A second factor which may have entered into the perceptions of needs for more physicians on the part of those physicians polled in the larger counties is that the subspecialists may have perceived the need for more generalists, and perhaps vice versa, thus inflating the overall number required. (This would not come into play in the sparsely populated areas where essentially all the physicians are engaged in general care.)

Another, probably more important, point is that the Bridgers method for estimating needs for specialists (consultant physicians and professional services physicians) may fall short of fully taking into account the heavy concentration of these physicians required in the six major referral centers where most of the highly specialized care is dispensed.

The Bridgers method made special mention that there is not yet available a reliable way to quantitate the need for individual subspecialists, but that this can be done satisfactorily only when considering general groups of specialists.

Whereas the method probably yields good first approximations of needs in a typical urban setting it may not be adequate for those cities where the bulk of the tertiary care is dispensed, and may thus yield a lower number of physicians "needed" than would be most desirable.

Thus, the CHP method may underestimate the physician needs in the sparsely populated counties and the Bridgers method may underestimate in the most heavily urbanized areas. If the higher of the two estimates were utilized in each county a set of composite goals, shown in Tables VI - IX, can be calculated.

This might be considered a measure of an optimum physician force to assure approximately equitable access for all citizens, with the reservation that whereas it is most probably a good estimate of the aggregate requirements for access and other physicians on a county by county basis, it does not specify the further breakdown of these large groups into specific numbers of specific specialists or generalists.

These calculations give an aggregate requirement for about 3700 physicians, distributed about 52.4 per cent access and 47.6 per cent others. In all counties the access physician to population ratio would equal or exceed 1 to 2,000, and the overall physician-population ratios would range from 1 to 2,000 to 1 to 680. In the aggregate, the physician population ratio would exceed somewhat the frequently expressed goal of 1 to 1,000.

The development of new Health Services Areas was noted earlier in this paper. If the data for the composite goals are reaggregated into these six areas the results (Table X) are rather satisfying: the physician-population ratio for access physicians range for 1:1639 to 1:1961; for all other physicians, from 1:1493 to 1:2564; and for total physicians, from 1:787 to 1:1087.

If the especially heavy concentration of physicians in

TABLE VI COMPOSITE GOALS 0-25,000 POPULATION

COUNTY	ACCESS	OTHERS	TOTAL
Autauga	12	10	22
Barbour	11	7	18
Bibb	7	1	8
Bullock	6	3	9
Butler	11	6	17
Cherokee	8	2	10
Choctaw	8	1	9
Clay	6	1	7
Cleburne	6	2	8
Conecuh	8	3	11
Coosa	5	0	5
Crenshaw	9	1	10
Fayette	8	3	11
Franklin	16	6	22
Geneva	12	5	17
Greene	6	2	8
Hale	8	2	10
Henry	6	4	10
Lamar	7	0	7
Lowndes	7	0	7
Macon	15	9	24
Marengo	13	7	20
Marion	13	5	18
Monroe	10	5	15
Perry	8	3	11
Pickens	11	2	13
Randolph	9	4	13
Sumter	9	2	11
Washington	8	1	9
Wilcox	8	1	9
Winston	8	3	11
TOTAL	279	101	380

TABLE VII COMPOSITE GOALS 25-50,000 POPULATION

COUNTY	ACCESS	OTHERS	TOTAL
Blount	13	3	16
Chambers	18	13	31
Chilton	14	4	18
Clarke	13	7	20
Coffee	20	15	35
Colbert	26	23	49
Covington	24	14	38
DeKalb	21	7	28
Elmore	20	9	29
Escambia	20	11	31
Jackson	23	11	34
Lawrence	14	2	16
Limestone	22	10	32
Pike	13	12	25
Russell	22	18	40
St. Clair	13	4	17
Shelby	20	7	27
Tallapoosa	21	15	36
TOTAL	337	185	522

TABLE VIII COMPOSITE GOALS 50-100,000 POPULATION

COUNTY	ACCESS	OTHERS	TOTAL
Baldwin	30	12	42
Cullman	26	13	39
Dale	26	24	50
Dallas	30	44	74
Etowah	54	63	117
Houston	35	52	87
Lauderdale	44	46	90
Lee	31	30	61
Marshall	30	31	61
Morgan	50	40	90
Talladega	39	25	64
Walker	33	19	52
TOTAL	428	399	827

TABLE IX COMPOSITE GOALS 100-645,000 POPULATION

COUNTY	ACCESS	OTHERS	TOTAL
Calhoun	53	48	101
Jefferson	419	525	944
Madison	105	93	198
Mobile	167	207	374
Montgomery	105	142	247
Tuscaloosa	62	79	141
TOTAL	911	1094	2005

	ACCESS	OTHER	TOTAL
STATE:	1,955	1,779	3,734

HSA REGION	ACCESS PHYSICIANS	ALL OTHER PHYSICIANS	TOTALS
I- (Huntsville)			
Number of Physicians	377	283	660
%	57.1	42.9	100.0
Physician-Population Ratio	1:1818	1:2439	1:1042
II- (Tuscaloosa)			
Number of Physicians	109	89	198
%	55.1	44.9	100.0
Physician-Population Ratio	1:1961	1:2439	1:1087
III- (Birmingham)			
Number of Physicians	512	562	1074
%	47.7	52.3	100.0
Physician-Population Ratio	1:1639	1:1493	1:787
IV- (Gadsden)			
Number of Physicians	240	180	420
%	57.1	42.9	100.0
Physician-Population Ratio	1:1923	1:2564	1:1087
V- (Montgomery)			
Number of Physicians	385	361	746
%	51.6	48.4	100.0
Physician-Population Ratio	1:1852	1:1961	1:962
VI- (Mobile)			
Number of Physicians	332	304	636
%	52.2	47.8	100.0
Physician-Population Ratio	1:1961	1:2174	1:1031
STATE-			
Number of Physicians	1955	1779	3734
%	52.4	47.6	100.0
Physician-Population Ratio	1:1830	1:2011	1:958

TABLE X
COMPOSITE REQUIREMENTS, PER HSA REGIONS

Birmingham, the major tertiary care referral center, is taken into account, all the areas appear to have reasonable and equitable composite goals, and a reasonable distribution between access physicians and all others, thus lending at least some eredence to these projections of needs.

It must be pointed out, however, that these composite goals for HSA's must not be permitted to obscure the severe shortages in some sparsely populated areas of some HSA's. Indeed, it might be appropriate in some cases to recognize that the idealized, composite goal is essentially unattainable, and for HSA's to grapple with other, more viable alternatives for assuring care for some citizens. This point will be returned to below, and in future papers.

How far from these ideal goals are the numbers of current physicians? Reference to Table XI will demonstrate why a firm answer cannot be given, because the actual number of physicians is in question. The number listed in the CHP report is several hundred smaller than the number of licensed physicians with Alabama addresses[4].

Many physicians at the military bases dispense care to nonmilitary patients, but they are excluded from both tallies. Some would question whether house officers should be counted, whereas others point out that they certainly dispense a large amount of care. The major uncertainty arises not because the actual head count may be in doubt but because there is no firm measure of the productivity of the individual physicians.

For these and other reasons the actual distribution of full time equivalents of practicing physicians is not known with certainty. Although it would be very useful to know the aetual size of the physician force, for the purposes here both tallies reveal essentially the same findings.

There is a relatively modest shortage of physicians in the aggregate, and in the light of the expected number of new licencees (approximately 400/year) this deficit in numbers will be made up in a very few years. Nonetheless, the inequities may continue because there is every likelihood that the new physicians will distribute themselves as have those currently in practice[4,5].

The data are presented here grouped by HSA's because of the major impact which they may have in the future in terms of determining the distribution of health services. Consider their charges, based upon the law which mandated their creation: describing patient population makeup in terms of income, ethnic backgrounds, and health care needs; developing a profile of physicians; analyzing the role of any given hospital vis-a-vis other area hospitals.

The HSA's, which by law contain a majority of nonproviders on their boards, should be cognizant of some initiatives which might be considered very worthy, but might prove fruitless. For example, the population destiny of a county is such a powerful determinant of the size of a physician force[4] that attempts to entice physicians to some of the most sparsely populated areas will often be unsuccessful unless there are comparable efforts to entice new people to the areas, via new industry, for example.

State differently, it may well be that the most productive initiatives of the HSA's which will lead to improved health for their citizens will not necessarily be those dealing directly with health services *per se.*

In faet, a completely defensible position can be advanced that (in the light of the leading causes of morbidity and mortality)* successful efforts to reduce the incidence of self-imposed risks such as smoking, drug abuses, obesity, environmental pollution, and automobile accidents would have a far greater impact upon the health status of the population as a whole than would *any* increase, no matter how large, in the physician force.

The author is aware that in the strictest interpretation of the new law, the role of the HSA is to identify needs, and not to provide "services." Nonetheless, it is most likely well

TABLE XI

HSA	NUMBER OF PHYSICIANS (PHYSICIAN/POPULATION)		
	CHP TALLY	1975 LICENSED M.D.'S	COMPOSITE GOAL
I	458 (1:1508)	500 (1:1381)	660 (1:1042)
II	131 (1:1644)	175 (1:1230)	198 (1:1087)
III	978 (1:863)	1492 (1:565)	1074 (1:787)
IV	264 (1:1737)	295 (1:1555)	420 (1:1092)
V	454 (1:1633)	590 (1:1211)	746 (1:962)
VI	471 (1:1390)	581 (1:1127)	636 (1:1031)
STATE	2756 (1:1298)	3633 (1:985)	3734 (1:958)

within the intent of the new law that the above "services," if such they be, would be applauded rather than prohibited.

Perhaps considerations such as these, and implementation of appropriate remedies, is a goal which should command some attention of the new HSA's - a worthy one which transcends considerations of how many physicians are required where.

I wish to acknowledge the valuable assistance of Peggy Ellert in the assembly of the data presented here. The views expressed are those of the author, and do not imply any official endorsement by the University of Alabama in Birmingham.

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*The leading causes of death in the United States are: diseases of the heart, malignancies, cerebrovascular disease, accidents, influenza and penumonia, certain early infant diseases, diabetes mellitus, emphysema and asthma, and cirrhosis. The major medical causes of serious morbidity are: arthritis, chronic sinusitis, asthma, hay fever, visual or hearing impairment, hypertensive disease, peptic ulcer, chronic bronchitis, diabetes mellitus, heart conditions, orthopedic impairments, and alcoholism, drug addiction, and mental illness. It is unrealistic to expect physicians to have any significant impact upon the incidences of these conditions. ■

PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

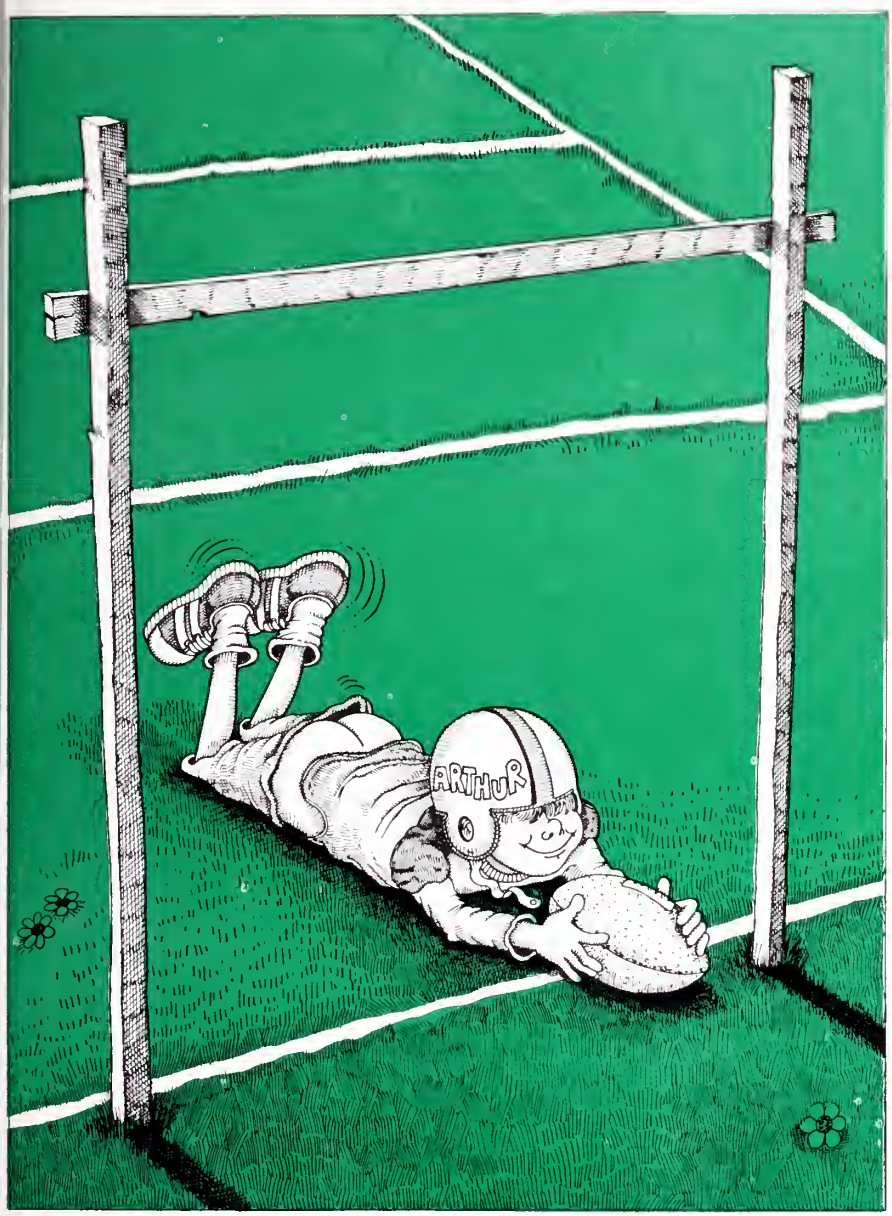
Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

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Please see prescribing information on facing page.

BY LARRY DIXON

Continuing Medical Educatio

Endocrinology and Metabolic Disease

Directions: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the *one* that is *best* in each case.

Questions 1–4:
A 19-year-old woman is seen by a physician because of primary amenorrhea, short stature and failure to develop breast tissue. Physician findings include: positive Chvostek sign; blood pressures of 210/110 mm Hg (right arm) and 110/70 mm Hg (right leg); "shield deformity" of chest; red-green color blindness. Both parents are 55-years-old and when tested for color vision they are found to be normal.

1. Which of the following diagnoses best explains all of the findings in this patient?
   A. Craniopharyngioma
   B. Coarctation of the aorta
   C. Congenital hypopituitarism
   D. Turner's syndrome
   E. Pseudopseudohypoparathyroidism
2. With regard to the pathogenesis of this patient's disorder, which of the following factors is most important?
   A. Mother's age at the time of the patient's conception
   B. Nondisjunction in the mother
   C. Maternal rubella infection early in the patient's gestation
   D. Nondisjunction in the father
   E. None of the above.
3. Which of the following would be most helpful in establishing the diagnosis?
   A. Serum growth hormone determination during insulin-induced hypoglycemia
   B. Measurement of 24-hr urinary excretion of gonadotropins
   C. Determination of serum sulfation factor
   D. Immunoassay of serum parathyroid hormone
   E. Roentgenogram of the skull (lateral view)
4. Which of the following would be the most appropriate management of this patient?
   A. External irradiation of the pituitary fossa with careful monitoring of the visual fields
   B. Injections of human growth hormone, 5 mg twice per week
   C. Cyclic treatment with a combination of estrogen-progesterone
   D. Laparotomy to examine the gonads
   E. Administration of 100,000 units of vitamin D with a monthly determination of serum calcium
5. Each of the following findings is a feature of untreated primary Addison's disease in women EXCEPT
   A. increased plasma ACTH
   B. hypotension
   C. impaired taste perception for saline
   D. decrease in axillary and body hair
   E. increased areolar pigmentation
6. Each of the following statements concerning magnesium deficiency in humans is correct EXCEPT:
   A. It is indistinguishable from hypocalcemic tetany on purely clinical grounds
   B. It is commonly associated with hypokalemia
   C. It is a result of simple dietary inadequacy in an otherwise healthy individual
   D. It occurs in both hyperparathyroidism and hypoparathyroidism
   E. It contributes to the hypocalcemia found in persons with chronic alcoholism
7. Each of the following findings is common to the syndromes of mastocytosis and carcinoid tumor EXCEPT:
   A. Tachycardia and flushing
   B. Recurrent severe diarrhea
   C. Telangiectatic lesions of the skin
   D. hepatomegaly
   E. Hypertension
8. Each of the following is often associated with untreated primary Addison's disease EXCEPT:
   A. hyperkalemia
   B. hypoglycemia after prolonged fasting
   C. increased blood urea nitrogen
   D. hypocalcemia
   E. hyponatremia
9. A 40-year-old white man is brought to the emergency room with a 6-hour history of severe diffuse abdominal pain. During determination of the hematocrit, the plasma was noted to be milky. Each of the following should be considered EXCEPT:
   A. uncontrolled diabetes mellitus
   B. familial fat-induced hypertriglyceridemia (Frederickson's Type I hyperlipoproteinemia)
   C. alcohol ingestion
   D. Familial hypercholesterolemia (Fredrickson's Type II hyperlipoproteinemia)
   E. recurring pancreatitis
10. A 42-year-old woman ceases to menstruate. Possible causes include each of the following EXCEPT:
    A. chromophobe adenoma of the pituitary
    B. An early by normal menopause
    C. idiopathic ovarian failure associated with Addison's disease and the finding of serum antibodies against ovarian tissue
    D. virilizing tumor of the adrenal cortex
    E. hyperparathyroidism

CORRECT ANSWERS

1. D	5. C
2. D	6. C
3. B	7. E
4. C	8. D
5. C	9. D
	10. E



SIGHTS & SOUNDS

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UROLOGY

RECTAL FLAP REPAIR (BENEVENTI-CASSEBAUM) OF PROSTATO-RECTAL FISTULA (844)—Francis A. Beneventi, M.D. With the patient in the jack-knife position, wide exposure of the fistula is obtained by linear incision of the posterior rectal wall and rectal sphincters. A full thickness flap of the anterior rectal wall around the fistula is cut, its mucous membrane excised and the flap folded on itself, raw surface to raw surface. The defect in the anterior wall is closed over the buried sealed flap containing the fistula. 16 mm., color and sound, 14 minutes (1973)

TRIGONAL ILEAL ANASTOMOSIS (851)—Harry S. Pond, M.D. John H. Texter, M.D. The complications noted in several large series of patients undergoing a conventional ileal loop prompted the authors to attempt a method of joining the urinary tract to the isolated ileal conduit, which would prevent reflux of loop urine to the kidneys. This was accomplished by performing an anastomosis between the intact unmobilized trigone and the isolated ileal conduit. The author's experiences doing this procedure on laboratory animals, and now in over 30 patients at the Johns Hopkins Hospital, the Boston Children's Hospital, Ochsner Foundation, and the Medical College of Virginia Hospitals have convinced them that this technique offers superior protection of the upper renal tracts in patients undergoing urinary diversion for neurogenic bladder, if the diversion is done prior to upper tract deterioration. 16 mm, color and sound, 14 minutes (1973)

URINARY DIVERSION: THE ISOLATED SIGMOID CONDUIT (845)—Donald G. Skinner, M.D., Jerome P. Richie, M.D. This film depicts the construction of an isolated sigmoid conduit. The key to this procedure is the creation of an anti-refluxing ureteral-colonic anastomosis. These conduits do not reflux, have equal resting pressures and rate of emotying compared with ileal conduits, and a lower incidence of stomal problems. Colonic conduits also accommodate more favorably to actue occlusion than ileal conduits. This form of urinary diversion is recommended for patients with benign disease whose life expectancy is dependent upon preservation of renal function. 16 mm., color and sound, 16 minutes (1973) IV

VASECTOMY PROCEDURES (852)—Abel J. Leader, M.D. This film effectively shows all currently employed techniques of performing vasectomy: (1) the conventional vasectomy in which a segment of vas is removed and the cut ends tied with non-absorbable suture, (2) The hemoclip technique in which both an occlusive and crushing clip are applied to both the distal and proximal ends of the vas after removal of a segment and (3) the fulguration technique in which after simple vas section the proximal vas is fulgurated by the introduction of a fulgurating needle for a distance of 4 mm. and the external surface of the cut end of the distal vas is similarly treated. This is a technique popularized by Dr. Stanwood Schmidt of Eureka, California. 16 mm., color and sound, 10 minutes (1973)

VASECTOMY PATIENT COUNSELING (853)—Abel J. Leader, M.D. This film shows a simulated interview between the physician and a couple seeking information concerning vasectomy. All questions that can possibly be asked are answered in simple easy-to-understand language in order to obtain totally-informed consent. This film is suitable for lay audiences. 16 mm., color and sound, 10 minutes (1973)

TRANSPUBIC REPAIR OF MEMBRANOUS URETHRAL STRICTURES (854)—Keith Waterhouse, M.D. This film demonstrates the transpubic repair of membranous urethral strictures. The operation demonstrated is only suitable for patients with traumatic strictures and should not be used for strictures due to previous gonorrheal infection. 16 mm., color and sound, 14 minutes (1973) IV

AUTOTRANSPLANTATION OF THE KIDNEY FOR RENOVASCULAR HYPERTENSION (843)—Joseph J. Kaufman, M.D. The film shows the technique of renal autotransplantation for the correction of renal artery stenosis and hypertension. The indication for autotransplantation was the middle aortic syndrome in which the aorta and its primary branches is involved by arteritis. Because the iliac vessels are usually spared in this condition, this case provided excellent opportunity to correct the renal autotransplantation using normal vessels and without resorting to the use of free grafts. 16 mm., color and sound, 18 minutes, (1973) IV.

CADAVER DONOR NEPHRECTOMY WITH PREPARATION OF KIDNEY FOR PRESERVATION (848)—William S. Turner, M.D., FACS This film describes and demonstrates an orderly approach to cadaver kidney harvesting. The technique of donor preparation and bilateral nephrectomy with kidney and lymph packaging for transport to the regional preservation and transplantation center is presented in detail. 16 mm, color and sound, 16 minutes (1973) IV

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REFERENCES

1. McColl, J. D., et al.: **J. Pharm. & Exp. Therap.** 116:343, 1956
2. Quevauviller, Par Andre, et al.: **Presse Med.** 61:1480-1482, 1953
3. Maney, P. V., et al.: **J. Am. Pharm. Assoc.** 35:266-272, 1946

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CME CALENDAR

FEBRUARY

● February 2-6, 1976, University of Miami, "3rd Annual Course In Practical Modern Neurology," Hotel Fountainbleau, Miami Beach, Florida. Category I credit available.

● February 5-6, Sudden Infant Death Syndrome Symposium, Quality Inn, Mobile. Sponsored by the Mobile County Board of Health.

● February 6, "The Geriatric Symposium," VA Hospital, Tuskegee.

● February 9-11, "Basic Mechanisms of Disease," Louisiana State University Medical Center School of Medicine, Shreveport, Louisiana, Category I Credit Available.

● February 9-11, American College of Physicians, "Internists To Study Disease Mechanisms," LSU Medical Center School of Medicine, Shreveport, Louisiana, Category I Credit Available.

● February 14-15, Regional Meeting, American College of Gastroenterology, Grand Hotel, Point Clear, Alabama.

● February 15-21, 7th Annual Family Practice Refresher Course, Mills Hyatt House Hotel, Charleston, South Carolina, 40 AAFP Credit Hours Available, Tuition: $150, Deadline for Registration: February 1, 1976.

● February 16-22, 1976, American Thoracic Society, "New Orleans Mardi Gras Supercourse," contact: Ben Fontaine, American Thoracic Society of Louisiana, 333 St. Charles Avenue, New Orleans, La. 70130. PRA and AAFP credit available.

● February 18-20, "Immunological Mechanisms of Disease," Hilton Hotel, Gainesville, Florida. Sponsored by ACP and University of Florida College of Medicine. Category I credit available.

● February 19-21, Emory University School of Medicine—Obstetrics & Gynecology, "Infections In Gynecology-Obstetrics Practice," Pine Isle Hotel, Lake Lanier, Atlanta, Georgia, Category I Credit Available.

● February 20-21, "Challenges of Ambulatory Care of Tuberculosis", Hilton Hotel, Baltimore, Maryland. Contact: David Glasser, M.D., Baltimore City Health Department, Room C-231, Baltimore 21202.

● February 22-28, 6th Family Medicine Review, Session III, University of Kentucky Medical Center, Lexington, Kentucky. Registration Fee: $245. For further information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

● February 23-27, 1976, University of Miami, "Basic Neurology For Psychiatrists," Hotel Fontainbleau, Miami Beach, Florida. Category I Credit available.

● February 28-29, 1976, "4th Annual Anesthesiology Review Course," UAB Department Of Anesthesiology, New Basic Science Building, UAB Medical Center, Birmingham. Fee: $75 Contact: Dept. of Anesthesiology, UAB Medical Center, Birmingham, 35294.

● February 29-March 5, 1976, American Society of Contemporary Medicine and Surgery, "Tenth Annual Meeting And Scientific Assembly," Americana Hotel, Bal Harbour, Florida. Category I Credit - PRA available.

MARCH

● March 3-6, Emory University School of Medicine—Urology, "Urology Seminar On Urologic Surgery," Marriott Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● March 6-7, 1976, "Pediatric Genitourinary Radiology," Monteleone Hotel, New Orleans, La. Contact: Wanda Patton, Institute For Pediatric Radiology, 4148 N. Cleveland Ave., Kansas City, Mo. 64117. Category I Credit - PRA available.

● March 11-13, 1976, "Gynecologic Endocrinology", Department of OB-GYN - University of Tennessee, The Hilton Inn - Memphis Airport, Memphis, Tennessee, Category I credit available.

● March 14-18, 44th Annual Assembly, Southeastern Surgical Congress, Marriott Hotel, New Orleans, Louisiana.

● March 24-27, 1976, American College of Physicians, "Hematology And Oncology, 1976", University of Mississippi School of Medicine, Jackson Hilton, Jackson, Mississippi. For information and registration: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, Pa. 19104. Category I Credit - PRA is available.

● March 31 - April 3, 1976, University of Miami, "Renal Diseases And Hypertension," Americana Hotel, Bal Harbour, Florida. Category I PRA Available.

APRIL

● April 1-3, Emory University School of Medicine—Surgery, "General Surgical Approach To Vascular Disease," Omni International, Atlanta, Georgia, Category I Credit Available.

● April 5-7, Emory University School of Medicine—Pediatrics, "Neonatology For The Pediatrician," Grady Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 5-7, 1976, Medical Group Management Association, "Seminars On Medical Group Systems Development And Facility Design Construction And Financing," Maison Bupuy Hotel, New Orleans, La.

● April 8-10, Emory University School of Medicine—Obstetrics & Gynecology, "Gynecology Oncology and Instruction In Colposcopy," Crawford W. Long Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 8-10, Emory University School of Medicine—Orthopedic Surgery, "Techniques In Orthopedic Surgery," Grady Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 8-10, Emory University School of Medicine—Gastroenterology, "Three Days of Gastroenterology," (Sponsored by the American College of Gastroenterology), Royal Coach Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● April 15-17, 1976, 115th Annual Meeting Of MASA, The Governor's House, Montgomery, Category I Credit.

● April 19-22, Emory University School of Medicine—Cardiovascular, "The Treatment of Heart Disease," Royal Coach Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● April 23-24, "Management of Diabetic Complications," University of Kentucky Medical Center, Lexington. Registration Fee: $75 (2 days), $40 (1 day). Contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

● April 26-29, 4th Annual Spring Meeting, American College of Surgeons, Sheraton-Boston Hotel and the Statler Hilton Hotel, Boston, Massachusetts.

● April 28-30, Symposium on Gastrointestinal Radiology, Lexington Hilton Inn, Lexington, Kentucky. Registration Fee: $300. For further information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

THE MONTH IN *Washington*



National Health Insurance—"The public interest would be better served if the nation examined the goals of a national health insurance (NHI) program within the context of the existing health care system and directed its energies toward the perfection of that system," AMA President Max H. Parrott said in testimony before a subcommittee of the House Interstate and Foreign Commerce Committee.

"It is unnecessary to gamble on a whole new medical health system in order to meet the health care needs of all Americans," he continued.

Dr. Parrott told the subcommittee members of the medical profession's NHI plan (H. R. 6222) which builds on the structure of the present system of employer-employee group health insurance plans, mandating each employer to provide comprehensive and catastrophic benefit coverage with the employer picking up at least 65 per cent of the cost.

Employees would not be compelled to participate. The self-employed as well as the non-employed could purchase qualified private health insurance, through pools if needed, at a cost not more than 125 per cent of the cost of group plans. And, after a certain level of co-insurance is reached, depending upon income, the insurance would cover all remaining costs as a complete protection against catastrophic costs.

***

Medicare—The Senate Finance Committee also approved with few changes Medicare Amendments adopted earlier by the House. The major one assures that no prevailing Medicare fee for this fiscal year is less than for the previous fiscal year. An unintended effect of the new law tying physicians Medicare reimbursement in with a cost-of-living-type index was to roll back some fees. HEW didn't want to do anything about it, but the House at the urging of the AMA and other groups, agreed to prevent the rollback.

The Senate Committee added language to the House provision to indicate that in calculating the controversial fee index HEW should include to the extent feasible "factors related to any increases in costs of malpractice insurance and that index calculations should be prepared on a regional rather than a national basis."

The other Medicare changes include:

A one-year extension of authority to grant waivers of nursing staff requirements in rural areas where nurses are in short supply. (The House had approved a three-year extension.)

Repeal of a present provision which would make the Federal Employees Health Program rather than Medicare the primary payer of benefits for older or retired U. S. workers. (The amendment specifies that Medicare be the primary payer for people eligible for both programs.)

***

PSRO—Physicians in some larger states containing more than one Professional Standards Review Organization area may have a chance to choose a single, state-wide plan under legislation approved by the Senate Finance Committee. Texas, Louisiana and possibly some other states would qualify, HEW said.

The amendment by Sen. Lloyd Bensten (D-Texas) applies to states that have been divided into PSRO areas, and where no conditional PSROs have yet been designated. The HEW Department would poll the physicians in the areas to determine their preference for a local or a state-wide PSRO. If a majority of physicians in each area approve the state-wide plan, the verdict would have to be accepted by HEW.

The Texas Medical Association and other state societies, as well as the AMA, have fought for the rights of larger states to become single PSRO areas, but the HEW Department turned down the appeals on grounds PSROs were intended to be primarily local. As a result, large population states were divided into several PSRO areas. ■

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CHAMBERS COUNTY

CAMM, Gertrude Elizabeth, b 30, mc Univ. Pa. 68, recip. NBME 69, 13 Medical Park, Langdale 36864. Pd.

DAVIS, James Edward, b 35, mc Miami 62, recip. Florida 64, 10 Medical Park, Langdale 36864. S.

FERNANDEZ, Conrado, b 36, mc San Tomas 61, recip. Pa. 74, 13 Medical Park, Langdale 36864. Pd.

SANCHEZ, Gabriel, b 38, mc Bogota 64, recip. New York 74, 10 Medical Park, Langdale 36864. ObG.

CONECUH COUNTY

SMELTZER, Charles Clarke, Jr., b 42, mc Univ. Tenn. 71, recip. Mississippi 72, Conecuh County Hospital, Evergreen 36401.

JEFFERSON COUNTY

BALCH, Charles Mitchell, b 42, mc Columbia 67, recip. NBME 68, UAB Medical Center, UAB Station, Birmingham 35294. S.

BLACKSTONE, Eugene Hubert, b 41, mc Chicago 66, recip. NBME 68, UAB Medical Center, UAB Station, Birmingham 35294. C.

BLAUENSTEIN, Urs Walter, b 39, mc Zwick 65, Limited License 74, UAB Medical Center, UAB Station, Birmingham 35294. N.

CHI, Pei-Cheng, b 35, mc National Defense 60, recip. Georgia 74, 2701 10th Avenue, South, Birmingham 35205. Anes.

CONNERY, Francis Michael, b 40, mc Loyola 65, recip. NBME 66, 1025 South 18th Street, Birmingham 35205. I.

COURINGTON, Doris Payne, b 27, mc California 61, Limited License 70, 700 South 19th Street, Birmingham 35205. Path.

COYLAR, Willis Oren, Jr., b 34, mc Arkansas 58, recip. Arkansas 58, UAB Medical Center, UAB Station, Birmingham 35294. Anes.

CRESANTA, Daniel Anthony, b 42, mc St. Louis 68, recip. Missouri 68, UAB Medical Center, UAB Station, Birmingham 35294. Anes.

CUNNINGHAM, Russell Duval, b 32, mc Vanderbilt 58, recip. Tenn. 58, UAB Medical Center, UAB Station, Birmingham 35294. Pd.

DAVIS, James Grady, b 43, mc Alabama 70, recip. NBME 71, Cooper Green Hospital, Birmingham 35233. Or.

DOKUMACI, Ozdemir, b 31, mc Ankara 54, Limited License 74, UAB Medical Center, UAB Station, Birmingham 35294. Anes.

DYAS, Charles Louis, Jr., b 49, mc Hamburg 61, Limited License 75, UAB Medical Center, UAB Station, Birmingham 35294. Anes.

ERDMANN, Wilhelm, b 40, mc Hamburg 61, Limited License 75, UAB Medical Center, UAB Station, Birmingham 35294. Anes.

GERALD, Ann Eloise Koppius, b 43, mc Baylor 69, recip. Texas 69, Lloyd Noland Hospital, Fairfield 35064. D.

GERALD, Joe Lang, b 43, mc Baylor 69, recip. Texas 69, Lloyd Noland Hospital, Fairfield 35064. Or. S.

GFELLER, Eduard, b 37, mc Bern, Switzerland 64, recip. Maryland 67, 700 South 19th St., Birmingham 35233. P.

GOLDMAN, Lawrence Norman, b 44, mc Chicago 71, recip. NBME 72, 314 South Cedar Path Dr., Birmingham 35209.

GOODING, John Mansell, b 43, mc Philadelphia 71, recip. Ohio 71, UAB Medical Center, UAB Station, Birmingham 35294. Osteo.

HANSFORD, William Casson, b 40, mc Alabama 69, sb 70, 1605 2nd Avenue, North, Birmingham 35020. Pd.

HO, Kang-Jey, b 37, mc Taiwan 63, recip. Illinois 73, UAB Medical Center, UAB Station, Birmingham 35294. Path.

HOYT, Brown Price, II, b 47, mc Alabama 73, recip. NBME 74, 1615 25th Street, North, Birmingham 35234. I.

HUANG, Chi-Tsou, b 30, mc Taiwan 57, Limited License 74, 1717 6th Avenue, South, Birmingham 35205.

HUDSON, Noland Leonard, b 47, mc Alabama 73, recip. NBME 74, Carraway Methodist Hospital, Birmingham 35234. I.

KAHLER, John Gilman, b 42, mc Baylor 67, recip. Texas 67, 619 South 19th Street, Birmingham 35233. R.

KINNANE, Harry Earl, b 38, mc Alabama 64, sb 65, 700 19th Street, South, Birmingham 35205. P.

LAMB, Richard Norton, b 35, mc Harvard 61, recip. NBME 67, UAB Medical Center, UAB Station, Birmingham 35294. I.

LAMON, Eddie William, b 39, mc Alabama 69, recip. NBME 70, UAB Medical Center, UAB Station, Birmingham 35294.

LANGFORD, Keith Howard, b 25, mc Melbourne 54, Limited License 74, UAB Medical Center UAB Station, Birmingham 35294. NS.

LAZARTE, Jorge Alfredo, b 13, mc San Marcos 40, Limited License 66, 1700 7th Avenue, South, Birmingham 35205. P.

LEE, Daisy Si, b 34, mc Bowman Gray 61, recip. California 68, 1601 6th Avenue, South, Birmingham 35233. Pd.

LELL, William Alexander, b 42, mc Rochester 68, recip. Mass. 72, UAB Medical CEnter, UAB Station, Birmingham 35294. Anes.

LIU, Lawrence, B., b 39, mc Taiwan 64, Limited License 70, 700 19th Street, South, Birmingham 35205. Path.

McCANN, William Peter, b 24, mc Cornell 49, recip. NBME 50, UAB Medical Center, UAB Station, Birmingham 35294.

McGRADY, George Harris, b 45, mc Alabama 71, recip. NBME 72, 3334-B Avery Drive, Ft. McClellan 36201. ObG.

MIDDLETON, Malcolm David, b 31, mc London 64, recip. Virginia 74, 619 19th Street, South, Birmingham 35293. Anes.

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MORRISON, Samuel David, b 41, mc Tenn. 65, recip. Tenn. 66, Smolian Clinic, UAB Station, Birmingham 35294. P.

MURAD, Tariq Mohammed, b 36, mc Baghdad 59, recip. Virginia 67, 1919 7th Avenue, South, Birmingham 35233. Path.

NEPOMUCENO, Cecilio Santos, b 36, mc St. Thomas 62, Limited License 70, 1717 6th Avenue, South, Birmingham 35233.

OMURA, Martha Emily F., b 38, mc Cornell 64, recip. NBME 66, UAB Medical Center, UAB Station, Birmingham 35294. D.

PRETLOW, Thomas G., II, b 39, mc Rochester 65, recip. NBME 66, UAB Medical Center, UAB Station, Birmingham 35294. Path.

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SKIER, David Abram, b 42, mc New York 68, recip. NBME 69, 1016 South 18th Street, Birmingham 35205. Oph.

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SHEEHY, Thomas William, b 21, mc New York 51, recip. NBME 51, 700 South 19th Street, Birmingham 35233. I.

TAFT, Donald Milton, b 36, mc Mississippi 62, recip. Mississippi 63, UAB Medical Center, UAB Station, Birmingham 35294. Path.

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WOODRUFF, Chivers Richard, Jr., b 44, mc Alabama 74, recip. NBME 75, 1909 Laurel Rd., Birmingham 35216. GP.

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LAUDERDALE COUNTY

PATTON, Peter W. S., present Florence to P. O. Box 2010, Cloyd Blvd., Florence, 35630.

RAUSCH, Robert O., present Florence to Rt. 10, Florence, 35630.

LEE COUNTY

TURBEVILLE, Fred M., present Auburn to 124 Lee Dr., Auburn, 36830.

LIMESTONE COUNTY

CAUTHEN, Frank M., present Athens to 109 Yorkshire Dr., Athens, 35611.

SPRINGER, Jack S., present Athens to Doctors Building, Athens, 35611.

MADISON COUNTY

HYATT, Arthur J., present Huntsville to 250 Governors Dr., S. E., Huntsville, 35801.

YU, Peter Shu-Kuen, present Huntsville to 600 St. Clair Ave., Huntsville, 35801.

MARENGO COUNTY

LUCAS, John A., III, present Demopolis to Mississippi.

MOBILE COUNTY

BELL, J. Mac, Jr., present Mobile to 201 Bellevue Circle, Mobile, 36608.

CURTWRIGHT, William H., present Mobile to 1720 Center St., Suite 101, Mobile 36604.

MINOR, Walter, H., present Citrus Heights, Calif., to 2995 N. Casper Place, Titusville, Florida, 32780.

MONROE COUNTY

NICHOLAS, Francis E., present Monroeville to Rt. 2, Box 801, Monroeville, 36460.

MONTGOMERY COUNTY

BOGRAD, Nathan, present Montgomery to 1813 Hillwood Dr., Montgomery, 36109.

DOUGLAS, George C., present Wetumpka to 1110 Mulberry Street, Montgomery, 36106.

RANDOLPH COUNTY

EVERETT, Gerald W., present Woodland to 526 Price Street, Roanoke, 36274.

TUSCALOOSA COUNTY

GASCOIGNE, James T., present University to 84 Arcadia Drive, Tuscaloosa, 35401.

ROSE, Marilyn J. M., present Tuscaloosa to 471 30th Place Univ. Manor, Tuscaloosa, 35401.

RUBEN, Ethan B., present Tuscaloosa to 410-D 15th Street, East, Tuscaloosa, 35401.

NEW TELEPHONE NUMBERS

BALCH, Charles M., Jefferson 934-3028
BELL, John M., Mobile 342-5438
BLACKSTONE, Eugene H., Jefferson 934-2457
BLAUENSTEIN, Urs W., Jefferson 934-5283
CAMM, G. Elizabeth, Chambers 756-4111
CHI, Pei-Cheng, Jefferson 933-7537
COLYAR, Willis O., Jr., Jefferson 934-4696
CONNERY, Francis M., Jefferson 933-1460
COURINGTON, Doris P., Jefferson 933-8101
CRESANTA, Daniel A., Jefferson 934-4696
CROSS, M. Richard, Mobile 476-3752

CUNNINGHAM, Russell D., Jefferson 934-5275
DAVIS, James G., Jefferson 933-9211
DAVIS, James E., Chambers 756-4161
DOKUMACI, Ozdemir, Jefferson 934-4696
DOUGLAS, George C., Montgomery 834-2745
DYAS, Charles L., Jr., Jefferson 591-4000
ERDMANN, Wilhelm, Jefferson 934-4665
FERNANDEZ, Conrado, Chambers 756-4111
FONTENOT, Joseph L., Mobile 432-4601
GERALD, Ann, E. K., Jefferson 785-2121
GERALD, Joe L., Jefferson 785-2121
HANSFORD, William C., Jefferson 428-6377
HO, Kang-Jey, Jefferson 934-3224
HUANG, Chi-Tsou, Jefferson 934-3330
HUDSON, Noland E., Jefferson 254-6000
KAHLER, John G., Jefferson 933-5131
KIMMICH, Homer L., Mobile 433-4468
KINNANE, Harry E., Jefferson 933-8101
KOORS, John E., Pike 347-7838
LAMB, Richard N., Jefferson 934-3580
LAMON, Eddie W., Jefferson 934-3072
LANGFORD, Keith H., Jefferson 934-4654
LAZARTE, Jorge A., Jefferson 934-4658
LEDBETTER, Edith G., Lauderdale 247-3340
LEE, Daisy Si, Jefferson 933-4186
LELL, William A., Jefferson 934-4696
LIU, Lawrence B., Jefferson 933-8101
MANSON, James E., Mobile 438-9768
MIDDLETON, Malcolm D., Jefferson 934-4696
McCANN, William P., Jefferson 934-4584
MONTIEL, David C., Jefferson 934-3411
MORRISON, S. David, Jefferson 934-4107
MURAD, Tariq M., Jefferson 934-4977
NEPOMUCENO, Cecilio S., Jefferson 934-4131
OMURA, Martha E. F., Jefferson 934-4141
PHILLIPS, Gary E., Montgomery 284-1670
PRETLOW, Thomas G., II, Jefferson 934-4666
PRICE, Hoyt B., Jefferson 254-6000
PRITCHETT, Paulette S., Jefferson 934-4977
QUAYLE, Elizabeth S., Jefferson 934-2400
RAMEY, James R., III, Montgomery 284-1670
RATANAUBOL, Ubol K., Jefferson 934-4131
ROBINSON, Leonard H., Jefferson 934-3585
RUTSKY, Edwin A., Jefferson 934-3585
RUBEN, Ethan B., Tuscaloosa 345-0090
SAMUELSON, Carole W., Jefferson 967-8034
SAMUELSON, Paul N., Jefferson 934-4696
SANCHEZ, Gabriel, Chambers 756-4161
SEGREST, Jere P., Jefferson 934-4420
SKIER, David A., Jefferson 933-8273
SMELTZER, Charles C., Jr., Conecuh 578-2480
STEINHILBER, Richard M., Jefferson 934-5164
STOVER, Samuel L., Jefferson 934-3330
TAFT, Donald M., Jefferson 934-4713
VASSILIOU, Constantine P., Jefferson 934-5131
VAUGHAN, Tom B., Jr., Jefferson 934-4658
WILSON, Charles E., Jefferson 254-6000
WOODRUFF, Chivers R., Jr., Jefferson 823-4170
WILLIAMS, Joseph T., Jefferson 933-7081

MEMBERS REINSTATED

MADISON COUNTY
DANIEL, Hunter Brown, b 31, mc Tenn. 56, recip. Miss. 58, 401 Sivley Rd., Huntsville 35801. GP-Pd.
MARION COUNTY
SASSER, Ramon Carroll, b 36, mc Tenn. 62, recip. Miss. 65, Rt. 1, Hamilton 35570. S.
SHELBY COUNTY
ARIAS, Manuel, b 35, mc Bogota 60, recip. Ga. 72, 1891 Hoover Court No. 3, Birmingham 35226. R.

SPECIALTY CHANGES

JEFFERSON COUNTY
JOHNSON, Ingeborg M. . . . . Psychiatry
LAWRENCE COUNTY
HALL, Garland C. Jr. . . . . Family Practice
IRWIN, Willard W. . . . . Family Practice
RHYNE, Robert H. . . . . Family Practice

CORRECTION OF LISTING

MADISON COUNTY
McDONALD, Clyde C., b 42, mc LSU 67, recip. La. 67, 600 St. Clair Avenue, Suite 11, Huntsville 35801. S.

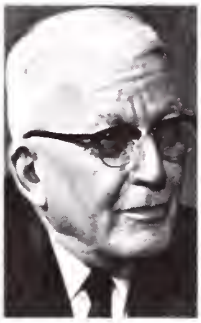
MEMBERS DECEASED

CHAMBERS COUNTY
CALHOUN, Samuel J., Langdale . . . . Deceased 10/5/75
WHEELER, Nicholas A., Jr., Lafayette Deceased 12/27/75
HOUSTON COUNTY
BYRD, Jesse L., Dothan . . . . . .Deceased 11/27/75
MACON COUNTY
HAMLETT, Mary K., Tuskegee . . . .Deceased 11/20/75
MADISON COUNTY
WALKER, Henry O., Huntsville . . . . Deceased 4/24/75
MOBILE COUNTY
MESZAROS, John P., Mobile . . . . . Deceased 10/1/75
TALLADEGA COUNTY
STOCK, Robert P., Childersburg . . . . . Deceased 7/ /75
WILCOX COUNTY
JONES, J. Paul, Camden . . . . . .Deceased 12/17/75

MEMBERS TRANSFERRED

CULLMAN COUNTY
ENSOR, Herman C., 404 Arnold St., Cullman 35055. From Jefferson County Medical Society.
FAYETTE COUNTY
PEACOCK, Peter B., 210 1st St., NW, Fayette 35555. From Jefferson County Medical Society.
MOBILE COUNTY
KIMMICH, Haydee J., 177 Louiselle St., Mobile 36607. From Baldwin County Medical Society.
RANDOLPH COUNTY
MITSUOKA, Hiroshi, Wadley Highway, Roanoke 36274. From Chamber County Medical Society.

NECROLOGY



John Paul Jones, M.D.
1894-1975

Dr. John Paul Jones, former President of MASA and former Chairman of the State Board of Censors, passed away December 17 at his home in Camden.

A graduate of Wilcox County High School, Dr. Jones received his undergraduate degree from the University of Alabama in 1913 and his medical degree from Tulane School of Medicine in 1917. He began his medical practice in Camden in 1920 and in recent years, he had maintained a limited practice there.

At the time of his death, Dr. Jones was serving as a life member of the Alabama Chapter, American Academy of Family Physicians, and a Life Counsellor to MASA.

RESOLUTION

WHEREAS, the Board of Censors of the Medical Association of the State of Alabama has learned of the recent death of Dr. J. Paul Jones, and,

WHEREAS, Dr. Jones has served his Association as its President and as the Chairman of its Board of Censors, and,

WHEREAS, Dr. Jones has served the people of Alabama both as a physician and as their State Health Officer, and,

WHEREAS, Dr. Jones deserves much of the credit for the prestigious position held by the Medical Association today, now, therefore, be it,

RESOLVED, that the Medical Association of the State of Alabama recognizes publicly the contributions of Dr. J. Paul Jones both to his State and to his Association, and be it further,

RESOLVED, that the Medical Association of the State of Alabama expresses its sympathy to the family of Dr. J. Paul Jones and shares their loss.

Mary Kline Hamlett, M.D.
1937-1975

Dr. Mary Kline Hamlett, of Macon County, died November 20, 1975, in a light plane crash. She was 38 years of age.

A native of Atlanta, Georgia, Dr. Hamlett received her medical degree from the University of Alabama School of Medicine. Since coming to Tuskegee in 1972 as an internal medicine specialist, she had been affiliated with the Lake Shore Clinic.

Digest of Actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the January 21, 1976 meeting of the State Board of Censors:

- Approved Financial Statement for the period ending December 31, 1975 showing receipts of $294,603.16 and disbursements of $289,229.99.
- Referred Annual Report of Secretary-Treasurer to District Caucuses for consideration.
- Authorized expenses for Mr. Richard C. Whitaker and Mr. John T. Mooresmith to attend the 16th Annual International Conference on Legal Medicine to be held May 12-16, 1976, in Bermuda.
- Authorized installation of an answering/dictating system on the incoming WATS Line at a cost of approximately $500.
- Referred to the District Caucuses the Annual Report of the Council on Medical Education with the recommendation that the CME requirements for MASA membership be adopted at the 1976 Annual Session, and further recommends that the Bylaws be amended by changing the requirements of the AMA's Physician Recognition Award to the requirements of MASA's Achievement Award.
- Referred the Annual Report of the Council on Public Affairs to the District Caucuses.
- Deferred for one month consideration of recipients for 1976 Annual Awards.
- Referred to District Caucuses the Annual Report of the Council on Legislation.
- Referred to District Caucuses the Annual Report of the Council on Medical Service and concurs in the recommendation of that report wherein "the Council recommends that its duties as stated in the Bylaws relating to insurance programs sponsored by the Association be changed in view of the fact that the Council on Socio-Economics was assigned the responsibility for the Association insurance programs."
- Referred to District Caucuses the Annual Report of the Council on Socio-Economics.
- Approved Continental Insurance Company's proposed disability insurance coverage for MASA members.
- Filled vacancies for expired terms of members on the 20 District Peer Review Committees.
- Voted to take position of opposing the payment of surgeons' assistants' fees.
- Authorized publication of article in *Alabama M.D.* advising physicians against signing hold-harmless contracts being circulated by hospitals.
- Accepted the Marion Co. Medical Society Constitution.
- Referred to District Caucuses the Annual Report of the Interspecialty Council.
- Recommended discontinuance of the third-party contract between MASA, Mutual of Omaha and the Department of Defense for the Champus Program.
- Regarding a request for an opinion by the Board of Censors from the Alabama Board of Hearing Aid Dealers on the ethical practice of physicians engaging in the fitting or selling of hearing aids for a profit, the Board of Censors reaffirmed the AMA Judicial Council's position that "It is not improper for a physician to own an optical dispensing shop provided there is no exploitation of the patient." The Board approved the adoption of the same opinion in regard to the question of fitting or selling of hearing aids for a profit.



Physician's Placement Service In Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

Family Practice: Age 33; Loyola University Stritch 1968, National Board certified; American Board eligible; seeking multi-specialty group, single specialty group, partnership, solo, emergency room, or other. LW-03102.

General Practice-Radiology, Diagnostic: Age 30; Osmania University 1968; American Board eligible-radiology; seeking multi-specialty group, single specialty group, partnership, institutional, emergency room, solo, or other. Available July 1976. LW - 02611

Family Practice, Obstetrics-Gynecology: Age 44, National Taiwan University, 1958; American Board certified, OBG; seeking institutional, research, public health, academic, partnership, solo, or other. LW - 02906

General Practice-Psychiatry: Age 44; University of Madrid 1959; American Board certified, psychiatry; seeking institutional, single specialty group, partnership, emergency room, solo, or other. LW - 00661

Internal Medicine-Emergency Medicine: Age 29, Medical College of Alabama 1972; National Board certified; American Board eligible; seeking emergency room, industrial, or multi-specialty group. LW - 03382

Internal Medicine: Age 27; University of Miami 1973; National Board certified; American Board eligible; seeking single specialty group, partnership, multi-specialty group, or solo. Available July 1976. LW - 02551

Internal Medicine-Gastroenterology: Age 33; Medical College of Virginia 1969; National Board certified; American Board eligible; seeking multi-specialty group, institutional, single specialty group, or partnership. Available August 1976. LW - 02599

Internal Medicine-Gastroenterology: Age 33; University of Iowa 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership. Available July 1976. LW - 01817

Internal Medicine: Age 32; University of Kentucky 1970; National Board certified; American Board eligible; seeking solo, partnership or research. Available July 1976. LW - 03320

Pediatrics: Age 30; SUNY Upstate New York 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership, solo, or other. Available July 1976. LW - 02336

Orthopedic Surgery: Age 33; University of Pittsburgh 1969; National Board certified; American Board eligible; seeking single specialty group, partnership, solo, multi-specialty group or other. Available June 1976. LW - 02614

Orthopedic Surgery: Age 33; Southwestern Medical School 1060; National Board certified; American Board eligible; seeking research, partnership, single specialty group, multi-specialty group, or solo. Available July 1976. LW - 02812

Surgery: Age 38; Jefferson Medical College 1966; National Board certified; American Board certified; seeking single specialty group, partnership, multi-specialty group. Available August 1976. LW - 02968

Surgery: Age 34; Loyola University Stritch 1968; National Board certified; American Board eligible; seeking partnership, single specialty group, multi-specialty group, solo, or institutional. Available August 1976. LW - 02954

Family Physician, academic. New University-affiliated residency in city of 60,000 in NE Alabama needs full-time faculty physicians to teach and practice family medicine. We require boards (or eligibility), capacity for hard work, and skills in obstetrics and behavioral medicine. Will accept pediatrician or internist who wants to learn family practice. Start at any level from instructor to co-director. Discover a truly rewarding personal and professional life: interesting practice, cordial atmosphere, humanistic academic style, lovely city and a good income. PW-10

PHYSICIANS WANTED

(Opportunities For Practice)

Emergency Physician $60,000 for 45 Hr. week; paid insurance, convention; modern 300-bed general hospital.

Physicians wanted **(General Internal Medicine, Gastroenterologist, Dermatologist)** Trade area, 400,000 population. Population of town: 45,000, located in Northeast Alabama. Small town advantages with big city conveniences within hour's drive. Ground floor professional opportunity to join a group of internists in the development of programs in General Internal Medicine, medical specialties, and other disciplines appropriate for the establishment of a regional multispecialty health clinic. Financial arrangements negotiable. No investment necessary. Opportunity for partnership in two years. PW-8

A community with combined population of 10,000 located near Mobile, Alabama is seeking a **general practitioner.** Office space available with living quarters. Several churches and schools. PW-9

General Practitioner opportunity in central Alabama town of 4500 population. Within 17 miles north of Montgomery, Alabama. The finest recreational areas in Alabama consisting of 2 large lakes. Newly expanded 69 bed hospital with 8 active staff members. Invitation to visit with expenses paid will be directed to those qualified. PW-4

(CONTINUED ON PAGE 54)

Digest of Actions of the State Committee of Public Health

The State Committee of Public Health at its regular meeting on January 21, 1976, took the following actions:

- Confirmed 9 Registrars and Deputy Registrars of Vital Statistics.
- Received report on Meningococcal Meningitis and Meningococcemia, Washington and Mobile Counties and was advised of an epidemic control effort using sulfonamides for an endemic area in Washington County where sulfa sensitive N. meningococcus sero Group B had been associated with cases and fatalities.
- Commended school officials for their cooperation in promotion of the immunization program with a state-wide total of 92.8% completely immunized against the required six childhood diseases prior to entrance into school.
- Received report on approval of the location of the Clinical Laboratory Building with a site approved by the Board of Trustees of Auburn University on the campus of Auburn University in Montgomery.
- Received for study a report "A Plan of Action for Selected Health Manpower" and a draft of a final report "Physician Manpower Study" for consideration by the Committee in February.
- Approved medical electronic linear accelerator for UAB of the Radiation Therapy and Tumor Institute building and approved an application by the Crenshaw County Hospital in Luverne for 19 patient rooms and a four-bed intensive coronary care unit.
- Approved six items for a Plan Amendment under Medicaid.
- Received information on the Demonstration Medicaid Project in Georgia and was advised by the Regional Commissioner of SRS that this mechanism was not considered for favorable utilization by Alabama at this time.
- Received information that the Optometrists had refused permission to grant a reduction in eyeglasses for adults as previously recommended by the Committee as an economy measure for the Medicaid Program.
- Advised of an enforcement action in progress requiring chlorination of Castleberry's water supply to correct bacteriological deficiencies indicated periodically over a prolonged period of time.
- Considered requests for waivers from the Little Sisters of the Poor, Mobile, regarding their new facility containing skilled, ICF and domiciliary beds. Approved a waiver regarding laundry rooms, visitors suites, and excluded from licensure the Repose Room and certain other religious facilities.
- Advised of the closure of the oyster beds at 6 a.m. January 19, 1976.

PHYSICIAN PLACEMENT SERVICE

(CONTINUED FROM PAGE 53)

Group practice opportunity for **General Surgeon.** Seven member clinic seeks a partner to practice general surgery. Community of 10,000+, near Tennessee River, 2 hours from the University Medical Center. New 100 bed J.C.A.H. approved hospital. Free inspection trip, relocation expenses, guaranteed income. PW-5.

General Practitioner's 2 family physicians wanted for general practice in a 64-bed hospital, located between 2 North Alabama towns (in the heart of the Tennessee Valley) with a trade population of 18,000. Office space available. Within 35 miles of large city. Large amount of industrial work in our area. PW-7

Internists, FP's, Ob-Gyn successful practice assured - 300-bed modern hospital, University affiliated, new connecting office building. All urban advantages for your family - Staff retirements leave immediate patient load - Assistance including 6 months free rent. Guaranteed minimum for right individual. PW-6

Internist wanted in central Alabama town with population of 4500 near large city. Newly expanded 69 bed hospital with new 6 bed intensive care unit. 8 member medical staff. Located within 15 minutes of 2 of Alabama's finest lakes. Invitation to visit with expenses paid will be directed to those qualified. PW-2

Pediatrician wanted in central Alabama town with population of 4500 near large city. Newly expanded 69 bed hospital with an active 8 member staff. Invitation to visit with expenses paid will be directed to those qualified. PW-3

WANTED—**General Internist** or Subspecialist with interest in general medicine. University town, population approximately 60,000, to join 4 other internists in a multi-specialty clinic setting; 250-bed expanding general hospital; all-specialty coverage, office expansion in progress; attractive living area. PW-11

General Surgeon wanted. Tremendous opportunity to associate with General Surgeon in North Ala. Located in the heart of Tennessee Valley Mountain Lake Region. Small town setting, pop. 10,000. Two hospitals (300 beds), ten minutes from Decatur, pop. 45,000. Thirty minutes from Huntsville. Unlimited recreational activities; golf, tennis, sailing. Excellent school system and cultural activities. PW-12 ■

McCormick Award Presented To Dr. Myers



DR. MYERS

State Health Officer, Dr. Ira L. Myers, has been selected to receive the Arthur McCormick Award from the Association of State and Territorial Health Officers for "his significant contributions to the field of health." The McCormick Award is the highest Award presented by the Association. Dr. Myers has been the Alabama State Health Officer since 1963. Dr. Daniel G. Gill, Alabama Health Officer from 1947-1962, was also a former recipient of the Award. ■

New Physicians Licensed To Practice In Alabama



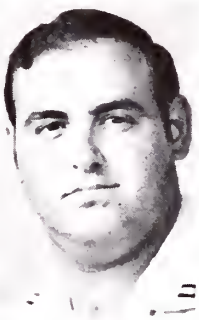
Heller, Edgar Elwood, M.D., Bowman Gray School of Medicine, 1950. Reciprocity with Minnesota. Location: Auburn, Alabama.



Bray, Maury Bert, III, M.D., University of Alabama School of Medicine, 1973. Reciprocity with National Board of Medical Examiners.



Graves, Stephen Carey, M.D., University of Arkansas School of Medicine, 1974. Reciprocity with Georgia (FLEX). Location: Phenix City, Alabama.



Herman, Robert Alan, M.D., Tufts University School of Medicine, 1972. Reciprocity with National Board of Medical Examiners. Specialty: Internal Medicine.



Burney, Robert Earle, II, M.D., University of Miami School of Medicine, 1960. Reciprocity with Florida. Specialty: Neurosurgery. Location: Auburn, Alabama.



Hadley, Thomas Wright, M.D., University of Minnesota School of Medicine, 1970. Reciprocity with Minnesota. Specialty: Pathology.



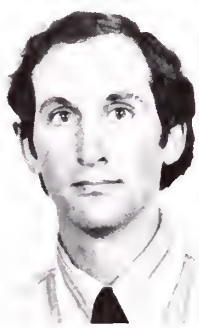
Hunt, Paul Jerome, Jr., M.D., Tulane University School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Caruso, Homer Achilles, M.D., University of Arkansas School of Medicine, 1961. Reciprocity with Arkansas. Location: Rainsville, Alabama.



Hales, Ernest Le Roy, M.D., California College of Medicine, 1971. Reciprocity with California.



Kingloff, Daniel Lee, M.D., Medical College of Georgia, 1973. Reciprocity with National Board of Medical Examiners.



Combs, Steven Paul, M.D., University of Iowa College of Medicine, 1970. Reciprocity with Iowa. Specialty: Orthopedic Surgery. Location: Montgomery, Alabama.



Hawley, Richard Charles, M.D., S.U.N.Y. Upstate Medical Center/Syracuse, 1972. Reciprocity with National Board of Medical Examiners. Specialty: Internal Medicine.



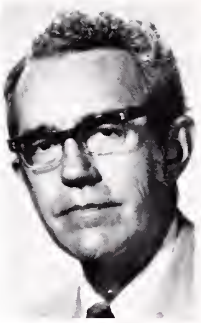
Lowman, Isom, M.D., William Beaumont Army Medical Center (Texas), 1972. Reciprocity with Georgia Specialty: Internal Medicine.



Malone, Thomas Francis Brian, M.D., National University of Ireland, Faculty of Medicine/Dublin, 1971. Reciprocity with New York (FLEX). Specialty: Anesthesiology. Location: Birmingham, Alabama.



Quayle, Elizabeth Scott, M.D., University of Toronto, Faculty of Medicine, 1968. Reciprocity with National Board of Medical Examiners. Specialty: Internal Medicine. Location: Birmingham, Alabama.



Stuntz, Richard Clark, M.D., Vanderbilt Medical School, 1950. Reciprocity with Tennessee. Specialty: OB/Gyn.



Nassery, Gharzai Malik, M.D., Medical College of Kabul (Afghanistan), 1959. Reciprocity with Pennsylvania. Specialty: Radiology.



Ruiz, Danilo Brillante, M.D., University of the Phillipines College of Medicine, 1962. Reciprocity with California (FLEX). Specialty: Surgery.



Tanaka, Paul Kenneth, M.D., University of So. California School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Nichols, Henry Cephus, M.D., Meharry Medical College, 1967. Reciprocity with Georgia. Specialty: Pathology.



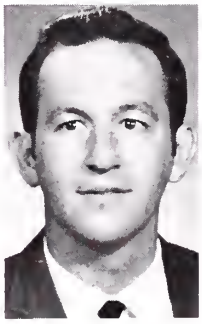
Shuman, Robert Luther, M.D., Bowman Gray School of Medicine, 1970. Reciprocity with National Board of Medical Examiners.



Thrower, Harvey Carlton, M.D., University of Alabama School of Medicine, 1974. Reciprocity with California (FLEX). Location: Tuscaloosa, Alabama.



Phillips, Joseph Franklin, M.D., Emory University School of Medicine, 1969. Reciprocity with National Board of Medical Examiners. Specialty: Radiology.



Smeltzer, Charles Clarke, Jr., M.D., University of Tennessee College of Medicine, 1971. Reciprocity with Mississippi. Specialty: Surgery. Location: Evergreen, Alabama.



Trippe, Bruce Sheldon, M.D., University of Maryland Medical School, 1971. Reciprocity with National Board of Medical Examiners. Specialty: Internal Medicine.



Pogue, Robert Hunter, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Spencer, Derek Victor, M.D., Howard University College of Medicine, 1967. Reciprocity with U.S. Virgin Islands.



Uphold, John David, M.D., Baylor College of Medicine, 1973. Reciprocity with Texas.

The School And The Community — Partners In Medical Education



G. Gayle Stephens, M.D.
Dean, School of Primary Medical Care
Huntsville

From the inception in 1972 of the University of Alabama System Medical Education Program, its clinical components in Tuscaloosa and Huntsville were planned as community-based schools of medicine that would utilize in the training of medical students the physicians, professional personnel, and clinical facilities already established in the community.

In return, the community-based clinical components at Huntsville and Tuscaloosa were intended to expand and diversify community health services and to provide local physicians and others concerned with health care delivery with opportunities for maintaining and advancing professional excellence through continuing education programs and resources for study and research.

Like most of the growing number of community-based medical education programs in this country, the School of Primary Medical Care of The University of Alabama in Huntsville has been thought of from the outset not simply as an added element in the community in which it happened to be located, but as an integral part of a specific community that was selected as the site of the school for definite reasons.

The nucleus of the third largest metropolitan area in Alabama, Huntsville serves as a regional health care referral center for Northern Alabama and South Central Tennessee. Huntsville Hospital, the fourth largest general hospital in the state, has the only fully staffed emergency room in the region, a coronary care unit, and intensive care unit, a Kidney Dialysis Treatment Center, a psychiatric intensive care unit, and only high risk nursery in North Alabama.

The crucial factor in determining not only the establishment of the community-based medical school in Huntsville but the rapid development of both its student and resident programs has been the active interest of large numbers of excellent area physicians.

As of December, 1975, the School of Primary Medical Care Clinical Faculty numbers 127 physicians from Huntsville and towns ranging as far west and east as Red Bay and Scottsboro and as far north as Savannah, Tennessee.

Serving on a volunteer basis, the Clinical Faculty has worked closely with the full-time and part-time salaried faculty members for more than two years in planning, implementing, and teaching the School's resident and student educational programs.

The Clinical Faculty's enthusiasm and hard work — 7,449 hours contributed in 1974 and 11,086 hours in 1975 — have made possible some distinctive educational experiences that are important to training for primary health care delivery.

From the beginning of short-term clinical student electives in October, 1973, and the arrival of the first resident a month later, student and resident training has been characterized by a preponderance of one-to-one faculty-student learning relationships; experience with both hospital and ambulatory patient care; experience in early diagnosis of illness; and experience through private practice exposure in the administrative aspects of health care and practice that are frequently not taught in formal curricula.

All these elements are significantly present in the required two-month preceptorship outside Huntsville for third-year family practice residents; in the required four-week rural preceptorship outside Huntsville for senior students that will begin next fall; and particularly in the assignment of every entering full-time junior student, beginning in the fall of 1974, to the office practice of a local family physician for one afternoon a week.

Dr. Wallace Frierson and Dr. Gilbert Kinzer, family physicians on the Clinical Faculty, have spearheaded the planning and carrying out of this system of volunteer physician-advisors who also serve as personal tutors and sponsors to the students across their various clinical rotations.

Each member of the Clinical Faculty agrees to contribute at least 50 hours a year to the educational programs of the UAH School of Primary Medical Care and to permit residents and students to see his or her patients. All appointments to the Clinical Faculty are subject to the approval of the Medical Education Committee, which is drawn from the Madison County Medical Society and the Huntsville Hospital Medical Staff.

The governing board and administration of Huntsville Hospital have played an indispensable role in planning the participation in the care of hospitalized patients by residents and medical students and in establishing the Family Practice Center with The University of Alabama in Huntsville. The UAH Family Practice Center began operation in its original location in March of 1973 as a joint venture with Huntsville Hospital, which received $140,000 in Model Cities money over two years to operate a neighborhood clinic on the site.

The new UAH School of Primary Medical Care Ambulatory Care Center, which includes the Family Practice Center, and the School's Clinical Sciences Center, scheduled for completion in 1977, form with Huntsville Hospital's two units a geographic and functional nucleus for health care education and delivery throughout North Alabama.

The UAH School of Primary Medical Care also has a written affiliation agreement with the hospital at Redstone Arsenal and informal working relationships with Medical Center Hospital and Crestwood Hospital in Huntsville.

Through written agreement with the City of Huntsville,

(CONTINUED ON PAGE 58)

(CONTINUED FROM PAGE 57)

THE SCHOOL AND THE COMMUNITY— PARTNERS IN MEDICAL EDUCATION

second-year residents under the supervision of a full-time faculty member staff the Westside Medical Center five days a week. A member of the volunteer faculty in obstetrics and gynecology supervises the participation of residents and students in the pre-natal clinics run by the School for the Madison County Health Department.

All service programs of the School of Primary Medical Care of The University of Alabama in Huntsville are intimately and directly related to teaching. It is not the intention of the School to fill all existing vacuums in medical care services; however, the School's basic mission – to train more physicians who will deliver primary health care in Alabama – makes some unique requirements that the School be involved in community services that contribute to continuing and comprehensive medical care of patients.

In addition to bringing more money for health care delivery into the Huntsville area, the UAH School of Primary Medical Care provides in its Ambulatory Care Center a health sciences library and a learning resource center that are open to the health community as well as to faculty, students, and residents. The Ambulatory Care Center's auditorium/cafeteria, the largest auditorium in the Huntsville Medical District, is available to local physicians and other health professionals for conferences and continuing education programs.

Most of the School's own Continuing Education activities, directed by Herbert T. Smith, M.D. take place here, including recent postgraduate conferences on "Alcoholism" and "Caring for the Helper" and the course in "Update Orthopedics for the Family Physician" to be given on March 25 and 26, 1976.

A community-based medical school represents a return, in some ways, to a former medical school model in which almost all the faculty were practicing physicians. Among the consequences of the reforms in medical education following the publication of the Flexner Report have been an increasing proportion in most medical schools of both full-time faculty members and hospital-based teaching.

While the Flexnerian reforms may have corrected some deficiences in the training of physicians, inadvertently they may have fostered others. The necessary dependence of community-based medical education programs on the community for faculty, patients, and facilities is only part of a picture that includes not only more money, resources, and supporting co-professionals for existing health care in the community, but the hope of more effective education of medical students and residents.

(Dr. Stephens wishes to acknowledge the considerable efforts of Ms. Thalia Haak in the preparation of this report.) ■

Auxiliary



Mrs. William D. Hughes
President

New Year's Resolution

"The new year is upon us
It shows in various ways
Trees and boxes piled in the streets
And bills that must be paid!!"

It's that time again when many of us make our "new year's resolutions." If you are searching around for a few, here are some suggestions:

I know it is time to pay dues for membership in MASA and the AMA as well. It is probably time for county dues to be paid, too.

We encourage all physicians to belong to their local county medical society, and especially if they are married. Bylaws in most county auxiliaries state that for the spouse of a doctor to be eligible for membership, that doctor must belong to the local society. We need all our doctors and their mates to take their respective places in our organizations.

Membership in your local society gives you the opportunity to be an active participant, or, you may do like many others—be just a body. But, just like they say in politics, if you don't vote, then don't complain. If you aren't pleased with your organization, become actively involved and then suggest changes. (This applies to any organization as well.)

As you are resolving to pay your dues and become more actively involved, write out a check for ALAPAC, Alabama Medical Political Action Committee for at least $50.00—add $10.00 for your mate's membership. Since 1976 is an election year, dues are badly needed. Every cent of your dues is used for campaign contribution. Please mail your check to ALAPAC, 19 S. Jackson, Montgomery, 36104.

Whether you elect to use this method of supporting candidates is certainly an individual choice. As I wrote in the beginning, these were only suggestions, and I trust that you will consider them.

Pres.-Elect—Mrs. George Scofield/**1st Vice-Pres.**—Mrs. Lewis Young/**NW District Vice-Pres.**—Mrs. Aubrey Terry/**NE District Vice-Pres,**—Mrs. Eugene Bradley/**SE District Vice-Pres.**—Mrs. Emil Wright/**SW District Vice-Pres.**—Mrs. Charles Weaver. ■

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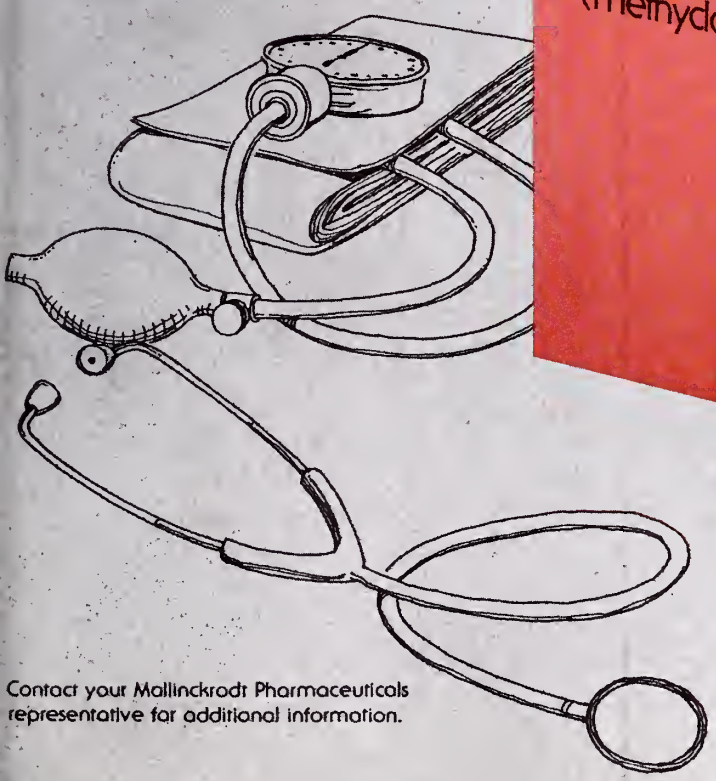
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in children. In addition, there is, of course, need t
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pyrilamine maleate 25 mg; sodium pentobarbital 30 mg
Warning: may be habit forming

*Based on usage by dosage form; data gathered by independent research organization.

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ARNING: may be habit forming.

NTRAINDICATIONS: Infants under 6 months. Acute ermittent porphyria, known hypersensitivity to barbiturates ntihistamines, known previous barbiturate addiction, ere hepatic impairment, CNS injury, senility, and presence ncontrolled pain.

ARNINGS: Barbiturates may be habit forming. Pre-existing chologic disturbances may be aggravated. Idiosyncratic ctions may occur. Acquired sensitivity may result in allergic ctions. Safety in pregnancy has not been established.

ECAUTIONS: Use cautiously with other sedative, hypnotic narcotic agents. Use with caution in patients with acute or onic hepatic disease, fever, hyperthyroidism, diabetes llitus, severe anemia, congestive heart failure, or a history drug dependence or suicidal tendencies. May impair rtness and coordination with increased accident risk.

ADVERSE REACTIONS: Drowsiness, fatigue, vertigo, incoordination, tremor, muscle weakness, ataxia, hypotension, respiratory depression, delirium and coma. Dryness of nose, mouth, and throat, pupillary dilatation or blurred vision, urinary retention, abdominal pain, nausea, vomiting, diarrhea, and hypersensitivity reactions. Overdose may result in hallucinations, excitement, ataxia, incoordination, athetosis, convulsions, and death.

DOSAGE AND ADMINISTRATION: Rectally, children 2-12 years of age, one WANS® CHILDREN every 6-8 hours as required. Children under 2 years of age may receive ½ the above dosage. *Adults:* Rectally, one WANS® No.1 Supprette™ to inhibit mild nausea and/or vomiting; one WANS® No. 2 Supprette to control pernicious vomiting. Repeat doses for adults should be 4 to 6 hours apart, not to exceed four doses in 24 hours. Moisten finger and Supprette with water before inserting. Optimum dosage must be determined in each case by the clinical response.

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ALASKAN ADVENTURE

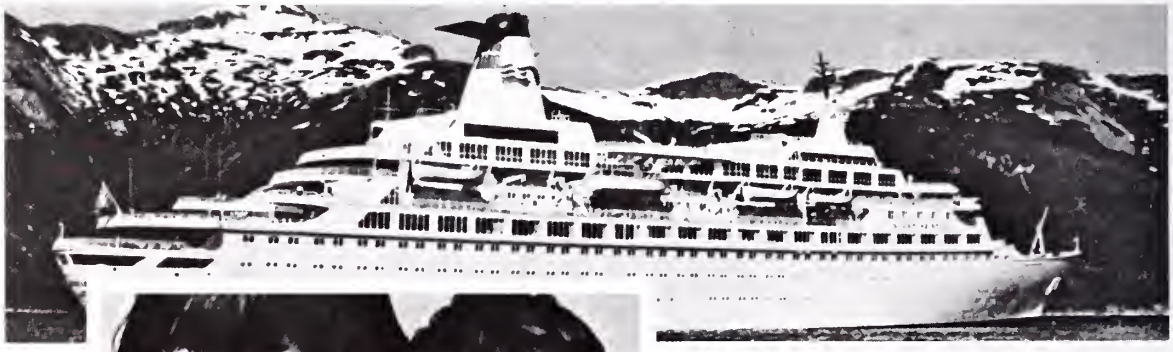
As announced in a previous issue of the *Journal,* MASA's summer trip for 1976 will be a fabulous Alaskan Adventure. The Alaskan Adventure will depart via chartered United Air Lines DC-8 jet on June 17, 1976 and fly directly to Vancouver, British Columbia.

One of the best features of this cruise is that when you board the Island Princess in Vancouver you will only unpack once for the full nine-day cruise. The Island Princess has every convenience and comfort available. It is a 20,000-ton elegant cruiser with 550 feet of spacious decks, lounges, dance floors, heated swimming pool, theatre, etc. The list could go on and on. Also, there is a generous 70-pound baggage allowance.

The Alaskan Adventure, arranged in conjunction with INTRAV, lists these outstanding ports-of-call—Vancouver, Ketchikan, Juneau, Skagway, Glacier Bay and Sitka. A Cruise Director will be available to arrange shipboard activities, shore excursions, shopping and to assist with all the optional shore excursions in each port.

The Alaskan Adventure is priced from $1198, depending on the stateroom category selected. This price includes the round trip jet transportation, the staterooms, plus complete American Breakfasts, full course lunch and dinner, afternoon teas and midnight snacks.

Below is a form for you to fill out to reserve your place on this excellent trip. Reservations are limited, so send in your reservations today with a deposit of $100, or contact the MASA Central Office for more information. ■



The Island Princess





ALASKAN ADVENTURE

PLEASE MAKE MY RESERVATION(S) FOR THE ALASKAN ADVENTURE.
ENCLOSED IS MY DEPOSIT OF $_____. ($100 for each reservation).

NAME _____ No. in Party_____

ADDRESS_____

CITY _____ STATE _____ ZIP_____

TELEPHONE _____

RETURN RESERVATION TO: MASA, 19 SO. JACKSON ST., MONTGOMERY, ALA., 36104.

ALABAMA DEPARTMENT OF PUBLIC HEALTH:

Bureau of Preventable Diseases

FREDERICK S. WOLF, M.D., DIRECTOR

VENEREAL DISEASE

The following material has been abstracted from the column, "Massachusetts Department of Public Health," in the *New England Journal of Medicine,* 293, 22, page 1150 (Nov. 27, 1975):

"..... there has also been a change in the socioeconomics of the diseases (Venereal Disease) which are no longer limited to central, urban, ghetto-type populations, but are seen in more suburban dwellers. At least, suburban residents now increasingly use the state venereal disease clinics. Characteristically, with the current economic recession, even before it became officially noticed in federal statistics, the state's venereal disease clinics experienced an increase in business, prompted partly, perhaps, by more enforced leisure time and, otherwise, by less eagerness or ability to pay for private practitioner care."

There has been an increase in the utilization of venereal disease clinics throughout Alabama.

TUBERCULOSIS

For the past eight years, the Division of Tuberculosis Control has urged the tuberculin testing of all individuals whether or not there is clinical evidence of tuberculosis. In tuberculosis clinics, the State has tuberculin-tested a very large group of people. Of this group, 85,000+ positive reactors agreed to and accepted prophylaxis with Isoniazid (300 mgm. daily) for varying lengths of time. The desired duration of prophylaxis is one year. The results of Alabama's program are published in the annual report on tuberculosis.

The International Union against Tuberculosis undertook a five-year program to determine the optimal effective duration of Isoniazid prophylaxis. A preliminary report of the first three years of the program has been received. This indicates that 94.9% of those accepting at least 80% of their medication had not converted to active disease during these three years. Shortening the period of prophylaxis provided to 24 weeks only 74.5% and to 12 weeks only 54.1% protection against conversion to active disease.

PHARYNGITIS

Dr. Caroline B. Hall authorized an article in the "Infectious Disease Newsletter," University of Rochester School of Medicine and the Monroe County Department of Health (Oct. 7, 1974), on the role of Mycoplasma pneumoniae in exudative pharyngitis. A paraphrase follows:

Experimentally, 50% of volunteers developed exudative pharyngitis when inoculated with Mycoplasma hominis. There was a cervical adenitis in most cases.

Children under two are rarely affected. From 2 - 5, there is usually a lower respiratory tract disease. About 5% of the age group 6 - 19 with M. pneumoniae pharyngitis commonly have exudate and lymphadenopathy. Parainfluenza viruses and adenoviruses are associated with pharyngitis in about the same percentage whereas steptococci were isolated 12 times more frequently.

This is a year-round illness with exacerbations (epidemics) in the summer and fall. Specific serological diagnosis is possible in the State Laboratory. A rise in titer is detectable two weeks after disease onset.

MENINGITIS

The occurence of several cases of meningococcal meningitis led to an epidemiologic investigation in South Alabama. These are preliminary comments made during an ongoing study. Five of these cases were serogroup B Neisseria Meningitidis. For the state area involved, this represents an attack rate of 150/100,000, many times the expected incidence of the disease. Fortunately these organisms isolated have been sulfa-sensitive serogroup B. The county health departments involved took prompt and systematic action toward antibiotic prophylaxis of household contacts.

VENEREAL DISEASE

How do you treat the venereal – some groups talk of 15 such infections – infections you diagnose in your patients?

GONORRHEA – November, 1975

Total Female Specimens	19,558
Positive Cultures	.978
Positive	5.0%
Submitted from Private Practice	11,260
Positive Cultures	.264
Positive	2.3%

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Report of Alabama Delegates
To
29th Clinical Convention
Of The
American Medical Association

Honolulu, Hawaii

November 30 — December 5, 1975

DELEGATES

Paul W. Burleson, M.D.
Birmingham

O. Emfinger, M.D.
Union Springs

W. E. White, M.D.
Anniston

ALTERNATES

E. B. Glenn, M.D.
Birmingham

Alfred Habeeb, M.D.
Birmingham

Julius Michaelson, M.D.*
Foley

**Absent*

TO: Members of The Medical Association of The State of Alabama
SUBJECT: Report of the 29th Clinical Convention of the American Medical Association

Your delegates, alternates and Association representatives to the 29th Clinical Convention of the American Medical Association, held November 30 – December 5, 1976, at Honolulu, Hawaii, respectfully submit the following report:

Whereas past meetings of the AMA House of Delegates have been concerned primarily with internal and national legislative subjects confronting the medical profession, the 1975 Clinical Convention found the AMA almost totally embroiled in socio-economic matters, foremost among these being a mounting crisis in the availability of liability insurance for physicians and surgeons, distribution of physician manpower, alternatives to National Health Insurance, strikes and slowdowns by physician groups and a multiplicity of similar problems.

In addition to the normal responsibilities incumbent upon delegates, Alabama's representatives met twice in caucus to consider pending reports and resolutions and on two additional occasions with representatives from adjacent Southeastern states in an attempt to determine the feasibility of a southwide consortium to resolve the liability insurance crisis.

Due to illness in his family, Alternate Delegate Julius Michaelson, M.D., of Foley, was unable to attend the session and his place was filled by Leon C. Hamrick, M.D., of Fairfield, Chairman of the Board of Censors.

Others attending the Convention were MASA President E. Vernon Stabler, Sr., M.D., William T. Wright, M.D., President-Elect, and William L. Smith, M.D., Secretary-Treasurer. In addition, more than 100 Alabama physicians and their families took advantage of an Association-sponsored holiday travel package to participate in Convention activities.

A summary of the highlights of the 1975 Clinical Convention appears on the following pages.

Respectfully submitted,

Paul W. Burleson, M.D., Chairman

Orizaba Emfinger, M.D.

William E. White, M.D.



Informality was the order of the day at the 29th Clinical Convention of AMA when the leadership adopted a policy that any type of dress would be suitable after the opening ceremonies. As the photo above indicates, delegates were not reluctant to wear informal attire at the business session of the House.

AMA DELEGATES' REPORT

AMA Reorganization

Despite recent financial difficulties the Council on Long-Range Planning and Development call for fundamental and far-reaching changes in the AMA was met with rebuff by the House of Delegates.

In a series of 21 recommendations, the Council had argued for changes making state medical societies—and not the individual MD—the basic AMA membership unit; revising the formula for representation in the House so that, essentially, the larger states would lose delegates and smaller states gain, as would the specialty societies, housestaff, and students; creating a new category of affiliate membership for the national medical specialty societies and "other" physician organizations; and cutting back to eight standing councils that would report to the Board of Trustees.

The House directed that the AMA will remain a federation of state medical societies; that proportional representation be maintained; that the specialty section councils be retained; and that the eight standing councils report to the House, not to the Board.

In other actions on the planning report submitted by the Council on Long-Range Planning and Development, delegates:

• **Rejected a proposal** that reference committee appointments be for four consecutive sessions of the House and that the size of the panels be increased from five to seven. The present system was retained.

• Eliminated the office of vice president, and stipulated that in the event of death, disability, or resignation of the president, the president-elect will assume the office for the unexpired term and his own elected term. Should both the president and president-elect die, become disabled, or resign, the Speaker of the House will become president.

• **Directed that the House Speaker** and vice speaker continue to serve on the Board without a vote.

• Rejected a resolution calling for a full-time AMA President. Also rejected was a call by the Council that the President serve a one-year term and not be eligible for re-election.

• Directed that the highest priorities of the AMA, as the advocate of patients as well as physicians, be "missions in public health and health care, with commensurate commitment of Association resources."

Budget

At the 1974 Clinical Convention in Portland, the AMA Board of Trustees presented to delegates a bleak fiscal picture. In Honolulu, the House commended its Trustees for the "superbly concise and succinct presentation of the fiscal plans of the Association, made possible by the newly applied approaches of zero-based and program budgeting."

In approving a 1976 AMA budget showing expenses of $42.8 million and revenue of $53.1 million, generating $10.3 million to replenish the Association's reserves, the delegates took note of several favorable trends:

• AMA equity on Nov. 30, 1975, was $19.4 million, up

$8 million from the figure of the previous year. The gain is almost entirely due to the $8.5 million contributed by the 142,000 members who paid the special $60 assessment levied last fall at Portland. It represents a dramatic improvement over the situation at year-end 1974, when a pressed organization was forced to borrow to meet operating expenses because all its assets were tied up in fixed assets, notably purchase of a computer and real estate. The AMA now has $5 million in liquid reserves, all in short-term investments, that it didn't have a year ago.

Despite the optimistic notes sounded in the budget and by reports from the board and the Ad Hoc Committee on Internal Affairs, one note of caution was sounded. All projections depend on a membership enrollment of at least 144,500 members.

Members will be asked to provide two-thirds of the AMA's reserves for the 1976 fiscal year by paying the $250 annual dues enacted this past June in Atlantic City, a figure more than double the $110 dues in effect from 1973-75.

Although AMA membership is at a record high, approaching 180,000, the gains have largely been made through recruitment of medical students and housestaff, whose dues of $15 and $35, respectively, are only expected to bring in $591,000 next year.

By contrast, 144,500 regular members paying $250 will bring in $36,125,000. The Association currently has about 162,000 regular members.

The almost 20,000 regular members who have not yet paid their assessment will continue to be billed in 1976, with a progress report to be submitted at the Annual Meeting.

Liability Insurance

The professional liability crisis probably will get worse in the next few months, but there are a few reasons for cautious optimism, the House was told.

Reports from the Board of Trustees outlined these steps in AMA's continuing campaign to improve the medical liability climate:

- AMA has received approval to incorporate a national reinsurance company in Illinois. Should it become necessary to activiate the company, $2 million in capitalization and surplus will be required. The House asked the Board to re-examine its rules for participation in the company, particularly as they apply to small state medical societies.
- **AMA will start** a major public and professional communications campaign in 1976, aimed at improving the medical liability climate.
- This past year's major efforts will be continued, including the drive toward significant tort reform. More than 150 tort provisions have been enacted by 35 state legislatures this year.
- **AMA will continue** to explore alternatives to the court system for resolving differences. Arbitration is one of these, and AMA and other groups are studying its effectiveness. A model arbitration agreement is being developed.

The House noted these actions, and commended the board as it accepted the reports.

In related action, delegates rejected a resolution asking that all physicians cease purchasing professional liability insurance as of Jan. 1.

Failure to purchase professional liability insurance exposes a physician to unlimited liability in most states with no apparent legal mechanism available to protect personal assets," a reference committee noted as it urged rejection.

Delegates also indicated they wanted no part of a request that professional liability coverage be included in any national health insurance legislation.

Socio-Economics

An ad hoc committee will be appointed by the AMA to undertake a crash program to investigate medical discipline nationwide.

Right To Bargain

Collective bargaining rights should be granted to interns and residents, the House of Delegates affirmed.

The delegates, with no debate, approved a Board of Trustees report saying that housestaff are both employees and students at the same time, and should have the right to organize and bargain for contracts with hospitals.

The action may have an important effect on cases now being deliberated by the National Labor Relations Board over the right of interns and residents to be considered employees, not students—therefore giving them rights to collective bargaining.

The Board's report further urges state and county medical societies to assist or represent interns, residents, and attending physicians in resolving disputes with hospitals.

Manpower

In other business from the student session, delegates approved a strong statement against sex discrimination in payment for services, recruiting, paying, promotions, and tenure, and appointment to policymaking posts.

Delegates also approved a resolution asking the Council on Medical Education to conduct a study of ways to provide financing for medical students' education.

The resolution notes that tuition is increasing, and directs the council to report back at the 1976 annual meeting in Dallas on voluntary mechanisms to finance medical school tuition.

A giant step toward a unified policy on foreign medical graduates (FMGs) was taken with adoption of a Coordinating Council on Medical Education statement on the subject by the House.

The report essentially recommends parity of treatment for FMGs and graduates of U.S. medical schools, while recommending that this country not rely on FMGs to solve its manpower distribution problems.

An important part of the report—from the AMA's viewpoint—recommends that all medical school graduates, whether foreign or U.S., have two years of approved graduate training before they can be eligible for full state licensure.

The House reaffirmed its opposition to conscription or coercion of physicians to practice in medically underserved areas.

Delegates also asked state and local medical societies to

'work with appropriate local health planning bodies to ssist rural communities in a logical service area to oordinate and share their health resources on a regional asis."

Nationally, the number of physicians in primary care pecialty training programs now exceeds the proportion urrently practicing in such specialties.

The Board concluded that basic demographic, economic, nd social forces are the chief determinants of physician listribution—not the temporary introduction of trained ersonnel into sparsely populated areas.

Legislation

The House turned back an attempt to withdraw support rom the AMA-sponsored national health insurance (NHI) lan, but agreed to work for a private-sector catastrophic ealth insurance program with the insurance industry.

The Louisiana delegation, with support from several ther delegates, attempted to withdraw support from HR 222, the AMA-sponsored health insurance plan based on oluntary coverage from private insurance firms.

But the Council on Medical Service supported a recommendation that the AMA meet with private insurance firms o try to develop a universal private catastrophic insurance lan, not based on Federal legislation.

In a related development, the House went on record as eing strongly opposed to the National Health Planning and Resources Development Act, passed by Congress in 1974.

Delegates approved AMA attempts to have the act nodified administratively or in Congress—and the AMA's villingness to sue the government over the law, if all other ttempts fail.

The AMA's lawsuit, if it is filed, would question the onstitutionality of the law, which would establish a new ational regulatory system to replace several existing lanning and development control programs, including the Comprehensive Health Planning Act.

In another important legislative issue, delegates approved strong Board of Trustees statement opposing proposed mendments to the Medicare and Medicaid laws.

The proposals, expected to be introduced in Congress oon by Sen. Herman Talmadge (D., Ga.), would reduce eimbursement rates to physicians under Medicare and Medicaid, freeze payment levels, and limit Medicaid fees to 80% of Medicare fees.

The House voted to expand AMA's legislative efforts to nclude participation by state and county medical societies.

State and major county societies were urged to appoint taff members to work on national legislative action, so that members can help testify and lobby on behalf of AMA positions.

- **Accepted a report** outlining AMA efforts to introduce egislative-reforms in the Administrative Procedures Act. The AMA-sponsored plan would curtail the power of executive departments, particularly the U.S. Dept. of Health, Education, and Welfare, to issue regulations extending the impact at Federal laws without adequate private-sector comment.
- **Approved changes in** Social Security procedures for determining retirement benefits for physicians. Current practice averages physician earnings back to 1950, though physicians were not covered by Social Security until 1965. Current procedure reduces the average earnings figure, therefore reducing the amount of retirement benefits to physicians. The AMA seeks to average earnings only since 1965.
- Restated the AMA's long-standing support for creating a separate U.S. Dept. of Health.

Economic Index

The House strongly criticized the Federal government's use of economic indexing to limit fees of physicians treating Medicare patients.

Three separate resolutions concerning indexing were turned aside by the delegates in favor of the simple, forceful pledge that "this Association take all appropriate action to seek a return of Medicare reimbursement to physicians' usual, customary, or reasonable charges."

Only by doing so, noted the house, could the government live up to its "legislative contract" with Medicare beneficiaries.

Delegates also asked the government to modify requirements on mailing to Medicaid recipients a statement of services that have been paid for them.

Other House action concerning Medicare and Medicaid included:

- **A call for deletion** of patient and physician names and Social Security numbers from the Social Security Administration's Uniform Health Data Abstract.
- Approval of AMA support for legislation (should it be introduced) that would provide Medicare payment for antigens to physicians who prepare but do not administer them.
- **A commendation to the Council on** Medical Service for its efforts to eliminate use of pejorative terms such as "Hi Doc" and "Aberrant Physician" by Medicare officials in referring to physicians whose practice patterns do not conform to statistical averages.
- Filing of a report that contended it would not be cost efficient to speed up availability of Medicare eligibility information to physicians.
- Opposition to state plans to make mass purchases of drugs for Medicaid recipients.

Review Compensation

Compensation of physicians for utilization review of inpatient care is a legitimate expense, the House voted.

Delegates further urged that the cost of the review be included in all hospital rates and reimbursable costs regardless of who is paying the patient's bill.

The house instructed its Council on Medical Service to initiate a dialogue with Blue Cross, Blue Shield, and other insurance carriers through the Health Insurance Assn. of America, to urge each to pay its proportionate share of utilization review costs.

The House reaffirmed its support for individual physicians who elect not to participate in government-mandated care review programs.

The House turned aside, however, a commitment of the AMA to legal action to protect the physician's right not to participate.

Sterilization

The House reaffirmed its support of less restrictive Federal regulations governing the performance of voluntary sterilizations paid for by the Medicaid program.

The AMA will form an advisory committee to meet with officials of the U.S. Dept. of Health, Education, and Welfare, to redraft regulations governing sterilizations and other Medicaid-funded family planning measures.

The AMA has criticized several HEW regulations governing sterilization. A major flaw was the rule that prohibited Medicaid payments for sterilization of women under 21.

Other criticized parts of the rules are those requiring consent forms to be signed no earlier than 30 days before the procedure is conducted, and those prohibiting sterilizations less than 72 hours after childbirth.

A requirement that a physician visit his patient in a skilled nursing facility at least monthly for the first three months of confinement and at least once every two months after that is not unreasonable, the House decreed.

It was noted that the level of care provided in a skilled nursing facility is of a high enough level to justify the physician-visit requirement now contained in Federal Medicare and Medicaid regulations.

Further, more frequent visits are permitted when medically justifiable.

Patients not needing the level of care provided by a skilled nursing facility can be transferred to an intermediate care facility. Patients in an intermediate care facility need only be visited once every two months by their physicians.

Hospital

The House voted support for hospital administrators and medical staffs that are besieged by a multiplicity of inspections and surveys, each checking compliance with a different set of standards.

On the subject of hospital governing boards, the House voted that physicians acting as spokesmen for the medical staff should be elected by the medical staff.

The House voted that JCAH should make it the duty of the hospital medical staff "to determine the necessity, frequency and type of health evaluation, as well as to recommend to the governing board the extent of privileges of each member of the medical staff."

Personal involvement remains the key to political success, delegates were told.

James C. MacLaggan, MD, chairman of the American Medical Political Action Committee, said that recent campaign reform legislation makes voluntary participation by MDs more important than ever.

"Each of you," Dr. MacLaggan told the delegates, "is an opinion leader in your community and this asset must be applied politically if medicine is to have the result it wants in the 1976 elections.

"It is incumbent upon every member of this house to support the candidate of his choice in an active and participatory way, in his own congressional district in the 1976 elections. If this house would assume this voluntary and participatory leadership, it could make a terrific impact on the 1976 elections."

During 1975, AMPAC achieved a record membership for the eighth straight year, Dr. MacLaggan noted, including a 10% gain in sustaining members and record membership totals posted by 14 state PACs.

Awards & Citations

CLAUDE E. WELCH, M.D.

The American Medical Association's highest honor—the Distinguished Service Award—has gone to Claude E. Welch, MD, Boston.

A noted surgeon, he is the editor of *Advances in Surgery* and a member of the editorial board of *Surgery*. He is the author of *Surgery of the Stomach and Duodenum* (4th edition, 1966); *Intestinal Obstruction* (1955); and *Polypoid Lesions, Colon and Rectum* (1964).

He is past president of the American College of Surgeons. In 1965, he was president of the Massachusetts Medical Society, the Boston Surgery Society, and the Society for Surgery of the Alimentary Tract.

He is a clinical professor of surgery at Harvard Medical School. A 1952 graduate of Harvard Medical School, he served a residency at Massachusetts General Hospital and later was visiting surgeon at that institution.

REP. PAUL ROGERS

Rep. Paul Rogers (D., Fla.) was named to receive the Citation of a Layman for Distinguished Service.

The House noted that Rep. Rogers, described as "Mr. Health" by colleagues because of his knowledge of the health field, has either authored or been the prime sponsor of much major health legislation, including the National Cancer Act in 1971, the National Heart and Lung Act in 1972, and the Clean Air Act of 1975.

The citation also noted that Rep. Rogers had been a leader in the fight against drug abuse. He wrote the 1970 Comprehensive Drug Abuse Act and helped enact the legislation creating the President's Special Action Office for Drug Abuse Prevention.

CHARLES A. LINDBERGH

The "Lone Eagle"—the late Charles A. Lindbergh—was given recognition by the House for his support of research with artificial medical devices.

A plaque was presented to Norman H. Gardner, MD, Connecticut delegate, and George H. Mills, Hawaii delegate, to be given to Lindbergh's widow, author Anne Morrow Lindbergh, in Connecticut.

AMA President Max H. Parrott, MD, said Lindbergh's interest in designing and implanting artificial medical devices led to successful techniques for organ transplantation.

Lindbergh, famous for his solo flight across the Atlantic in 1927, spent his last years in Hawaii and is buried on the island of Maui.

AMA-ERF

Nearly $2 million in contributions was given to the American Medical Association Education and Research Foundation (AMA-ERF) during the first nine months of 1975, reported foundation president Kenneth C. Sawyer, MD.

AMA-ERF has given $1,016,393 directly to medical schools for student loans as of Sept. 30, 1975, and during the first six months, 1,816 loans totaling $2,459,100 were given directly to medical students, interns, and residents and guaranteed by AMA-ERF.

Since the foundation's loan program began in 1962, AMA-ERF has guaranteed 57,015 loans valued at more than $66 million, Dr. Sawyer reported.

Other Actions

- Reactivation of an AMA committee against quackery and disclosure of government grants accepted by the AMA highlighted a series of routine housekeeping matters enacted by the House.
- **Delegates approved a resolution** establishing a Committee on Health Fraud.
- In directing MD's to refrain from entering into government contracts "that would compromise the ability of the Association to support and defend the private practice of medicine," Delegates stipulated that the House be kept informed of all Federal grants accepted by the AMA.
- **Established two new** sections on emergency medicine and nuclear medicine.
- Approved travel expense and honorarium policies for trustees and officers. When traveling on assigned Association business, trustees and officers are reimbursed $200 per diem, the vice chairman of the board, $250. The chairman of the board and president-elect are reimbursed up to a $60,000 annually, the president up to $75,000.
- **Revised dues for military MDs** at a full $250 annually for volunteer commissioned medical officers; $35 for obligated officers and commissioned interns, residents, and fellows, and $25 for commissioned civilian scholarship program fellows.
- Was told that embossed plastic membership cards are being considered as a part of an overall program to improve the AMA's physician records and computer systems.
- Rejected a resolution requesting promotion of AMA membership benefits by using the covers of *The Journal of the AMA* and state county society bulletins.
- **Rejected a resolution** calling for all AMA House meetings to be held in Chicago, barring extenuating circumstances, to conserve AMA funds. All interim meetings of the House will be held in Chicago starting in 1977, delegates noted, and the site of the Annual Meeting should be rotated throughout the country to encourage broader participation.
- Rejected a call for state medical societies to be paid $1 per member for collecting and processing AMA dues.
- Urged physicians to "continue to act as nonsmoking exemplars, to the public," and filed a board report describing what the AMA has done over the years regarding smoking, health, and subsidies to tobacco farmers.
- **Asked the AMA to** augment its efforts to improve the image of medicine as presented on television shows and to encourage portrayal of the positive aspects of good medical practice.
- Endorsed continued research on all types of passive and active vehicle passenger restrain systems.
- **Opposed hospitals'** use of medical staff application forms that grant them permission to examine all medical records of an applying physician. Investigation of the applicant's performance, however, was endorsed by the House, providing such investigation does not violate patient confidentiality.
- Urged hospitals "to take all reasonable measures to resolve labor disputes expeditiously so that citizens of the community are not deprived of essential medical services."
- **Urged that aliens seeking** American citizenship be guaranteed the right of free choice of physician.
- Asked the Board of Trustees to study encouraging regionalization of obstetrical care.
- **Approved three revisions** of residency training program requirements.
- Turned back an attempt to eliminate from state licensure form questions asking physicians about past history of mental illness, drug dependence, or alcoholism. The resolution had been submitted by the Section on Psychiatry, but the sponsors withdrew it when the reference committee recommended rejection. Reference committee testimony indicated strong sentiment for keeping such questions on state medical board forms, to help eliminate incompetent physicians.
- **Urged that the Board of Trustees** investigate the extent to which osteopaths are denied specialty board certification after completion of AMA-approved residencies. The measure reaffirmed the AMA policy that osteopaths should be permitted to enroll in approved residencies, and on completion should be eligible for both licensure and board certification.
- Accepted a report recommending extending the moratorium on licensing of allied health occupations until uniform licensing standards can be set up.
- Approved reforms in the handling of "exchange visitor" foreign medical graduates by the U.S. State Dept. New regulations would restrict sponsorship of FMGs to those who are exchange visitors and who have not applied for immigrant status. The council report recommends that the State Dept. fully inform FMGs now in the U.S. how the regulations would affect their visas, and that the government investigate the hardships that enforcement of the rule would impose on FMGs now in the U.S., and those still overseas who seek permanent immigration status.

Auxiliary Report

In enjoying its "best year ever," the AMA Auxiliary during 1975 boosted membership, changed its name, and launched new initiatives in community projects and legislation.

The purpose, of course, Auxiliary President Mrs. Erle E. Wilkinson, Nashville, told Delegates, is to enable doctors' wives to stand side by side with their husbands in the cause of improved medicine.

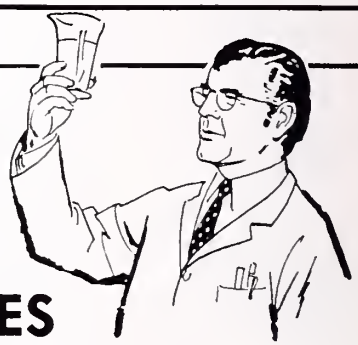
Membership in the AMA Auxiliary, formerly the Woman's Auxiliary to the AMA, is more than 90,000 and will soon surpass the 100,000 mark, Mrs. Wilkinson noted.

The Address of the President, by Max H. Parrott, M.D., will appear in the February issue of the Journal. ■

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The JOURNAL
of the
Medical Association of the State of Alabama

VOLUME 45, NUMBER 8 FEBRUARY 1976

Office of Publication
19 So. Jackson St. Montgomery, Ala. 36104
Subscription Price $12.00 Per Year
$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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Can it be possible that ten months have passed since the College of Counsellors and House of Delegates met at the Parliament House in Birmingham? Where has .8333% of the year gone? What has been accomplished in that time? What have we failed to do which should have been done, and what did we do wrong?

These are the days of reckoning for those of us upon whom has been conferred responsibilities for the proper functioning of this Association. The officers, Board of Censors and Councils, as well as the Board of Medical Examiners and State Department of Public Health are compiling their reports of stewardship for presentation to the College of Counsellors and House of Delegates, which convenes at the Governor's House Inn in Montgomery, April 15-17, 1976.

On the third day of the convocation, the College and House will finally determine whether their affairs have been properly and satisfactorily handled. The main assembly thus will speak with a voice larger and louder than any individual or group of individuals within the Association. These will be the voices of Medicine's grassroots—the 67 county medical societies. Presumably their representatives have been carefully selected for upon their shoulders will reside, during calendar year 1976, the responsibility for determining the future courses of the medical profession in this State.

This College and House can direct and re-direct any policies or programs which have been devised.

The practice of medicine, the socio-economics of health care, health and medical legislation and post-graduate education are the principal problem areas of organized medicine in this State and elsewhere.

The Annual Session is the time and place when the voting members of the College and House have their best opportunities to shape the destiny of the Medical Association of the State of Alabama. No one can deprive them of this opportunity nor relieve them of responsibility for any results which may obtain.

The halls of the main assembly will be open at all times for any member to see and hear the functioning of his designated representative.

MASA is operating this year, for the first time, under a brand new Constitution and Bylaws which has endeavored

(CONTINUED ON PAGE 74)

PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension
Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

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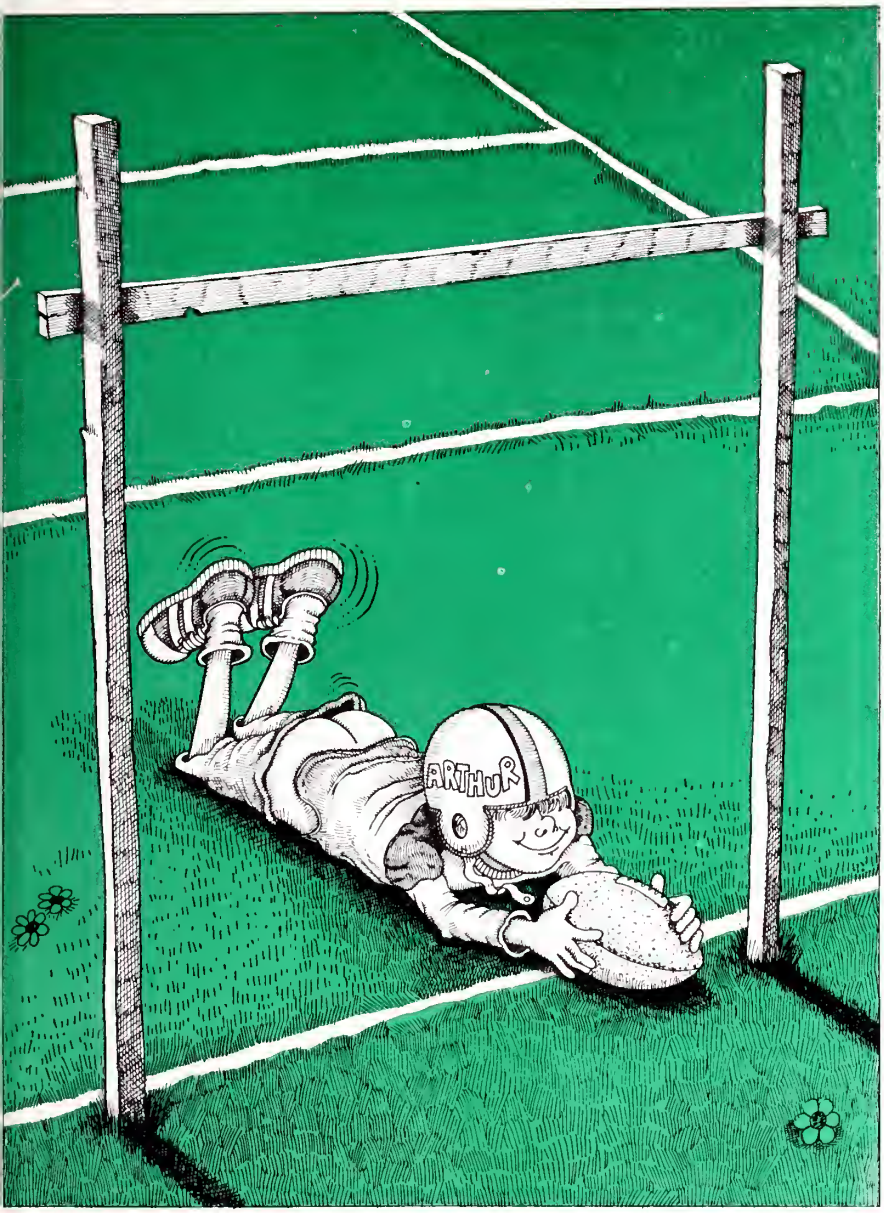
Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

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A REPORT:

The Malpractice Insurance Situation

The most pressing and immediate problem for the doctors of Alabama is settling the malpractice business.

Leon Hamrick, M.D., chairman of the State Board of Censors, Bill Wright, M.D., MASA's President-elect, Jack Mooresmith, MASA's legal counsel and your President were privileged to attend the recent AMA Leadership Conference in Chicago. The overriding question there from each state concerned malpractice insurance availability and cost.

The problems are many and severe for all 50 states. However, I came away feeling that we in Alabama are better cared for at this time than in most states, even with our termination date of July 31, 1977 with Employers of Wausau.

Our Alabama Medical Liability Act is a decisive advantage. I found no state act that I would care to exchange for ours. Nevertheless, we still have at least three and maybe more points we need added in the next legislative session if we are to successfully stay insured at anything approaching a reasonable premium. Your active assistance is urged when we finalize these requests in another one or two months.

A quick report is due you for clarification. No present company has been found that is willing to take over our policies at any price. Many have been contacted, in lieu of the fact that our experience with malpractice insurance has been good and profitable to Employers of Wausau.

As of now, we have two well known brokerage firms submitting plans and suggestions. It seems apparent that we will have to form some kind of MASA-owned company.

Several states already have their own companies. It seems to me personally that a MASA-owned company is preferable and to be desired. Our experience is such that it could be quite profitable and eventually assure lower premiums for us. At least, it will ensure our being insured and not dependent on the flow of the tide.

The ideal would be to have a well established company to form and manage our company for us, thereby insuring stability as well as proven know-how. We discussed this prospect with Wausau and received an interested hearing from their top management. They are going to investigate this possibility and give us either a proposal or advice, or both, before our April meeting.

Thanks to Wausau giving us the exter year to August 1, 1977, we have time to explore, accept and activate in time to assure ourselves of continuing coverage.

With three years of favorable experience and now much more favorable legislation – and much more cooperative atmosphere in our lawmaking halls – we are in an easier position. We have the interest of the recently appointed subcommittee of the Legislature on malpractice, apparently quite anxious to help solve this problem. The State Insurance Department has certainly been interested and very cooperative. The Governor and his advisors have been most helpful.

Many state are not nearly so fortunate.

The one big highly important, paramount, absolutely essential point for all our membership to remember is that we stay united – act as a unit. Our bargaining power with 2,900 policy holders is great – if we start defecting, going after splinter offerings, being tempted by cheaper "claims made" policies, we lose our greatest selling point.

You ask what each member can do? Stay together and let us bargain as a whole. The future is definitely promising.

E. Vernon Stabler

The Month In Washington

Congress Overrides Ford's Veto—President Ford's all-aout attack against rising government spending sustained a major blow with the Congressional override of his veto of a $45 billion health, welfare and labor bill.

The vetoed bill called for $1 billion more than the Administration's budget request and required hiring of 8,000 more HEW employees. Almost $800 million of the increase involves health programs which would receive a total of $3.9 billion for the fiscal year that ends September 30.

The bill provides more funds for such programs as Community Menial Health Services, Maternal and Child Health, medical research, Alcoholism and Drug Abuse Facilities, Emergency Medical Services, and education of health professionals. ■

Unnecessary Surgery—Mandatory second professional opinions have been urged for elective or non-emergency surgery under Medicare and Medicaid by a House Commerce Subcommittee.

The Subcommittee on Investigations and Oversight, which held hearings last fall on unnecessary surgery, charged in a report that there were an estimated 2.4 million unnecessary surgeries performed in 1974 at a cost to the public of almost $4 billion. The procedures led to an estimated 700 deaths, the report said.

Arguments that second opinions woulc cost money and not necessarily provide a solution and expert assertions that it is difficult to determine what constitutes unnecessary surgery were brushed aside by the Subcommittee in its strongly-worded report.

The Subcommittee recommended that HEW immediately undertake a study to determine the differences in health indices, costs and the surgical procedure rates between salaried surgeons and fee-for-service surgeons. ■

The Case Against UR—Congress has buttressed the medical and hospital professions' case against the Utilization Review Regulations originally promulgated by HEW.

The lawmakers approved with no dissent a provision making it clear that Congress never intended to require 100 per cent review of all Medicare-Medicaid hospital admissions, a key part of the controversial UR Regulations issued by HEW.

The AMA has challenged successfully the UR Regulations in court. The HEW Department is slated soon to issue revised regulations after court-ordered negotiations with the AMA.

One of the major arguments against the Regulations was that HEW had reached beyond Congress' intent in carrying out the review program. Congress' vote on the amendment to the Medicare-Medicaid laws appeared to back up the protests of the AMA and the American Hospital Association. ■

The Nation's Health—Americans' health continues to improve. Lower infant death rates and longer life expectancy are shown in a State of the Union's Health Report for 1975 submitted to Congresss and President Ford by the H.E.W. Department.

Rates of infant deaths in the U.S. declined from 29.2 per 1,000 live births in 1950 to an estimated 16.5 in 1974. Over the same period, life expectancy at birth increased by nearly four years. The death rate for heart disease is decreasing.

The report includes data on health care costs and financing, health resources and utilization, and health status. The death rate for heart disease among persons aged 55-64 dropped almost 15 per cent over the past six years. In the same age group, the death rate from cancer rose almost four per cent. Among younger people, accidents and homicide are major causes of death.

HEW has reported that U.S. health spending reached $118 billion in fiscal 1975. The increase in total spending was 13.9%. Public spending increased 22.2%, more than 2½ times the rate of increase in the private sector. Hospital care accounted for 39% of the total with physician services accounting for about 19%. ■

Arbitration: Michigan's Temporary Solution

Beginning January 1, 1976, patients who are seen by Michigan physicians will be asked to sign a document which would allow doctor-patient disputes (except for disputes over charges for services rendered) to be heard by an arbitration panel.

The document is the key to Michigan's temporary solution to the malpractice-insurance crisis. Passed by the Michigan legislature in the latter part of 1975, the new measure features these major provisions:

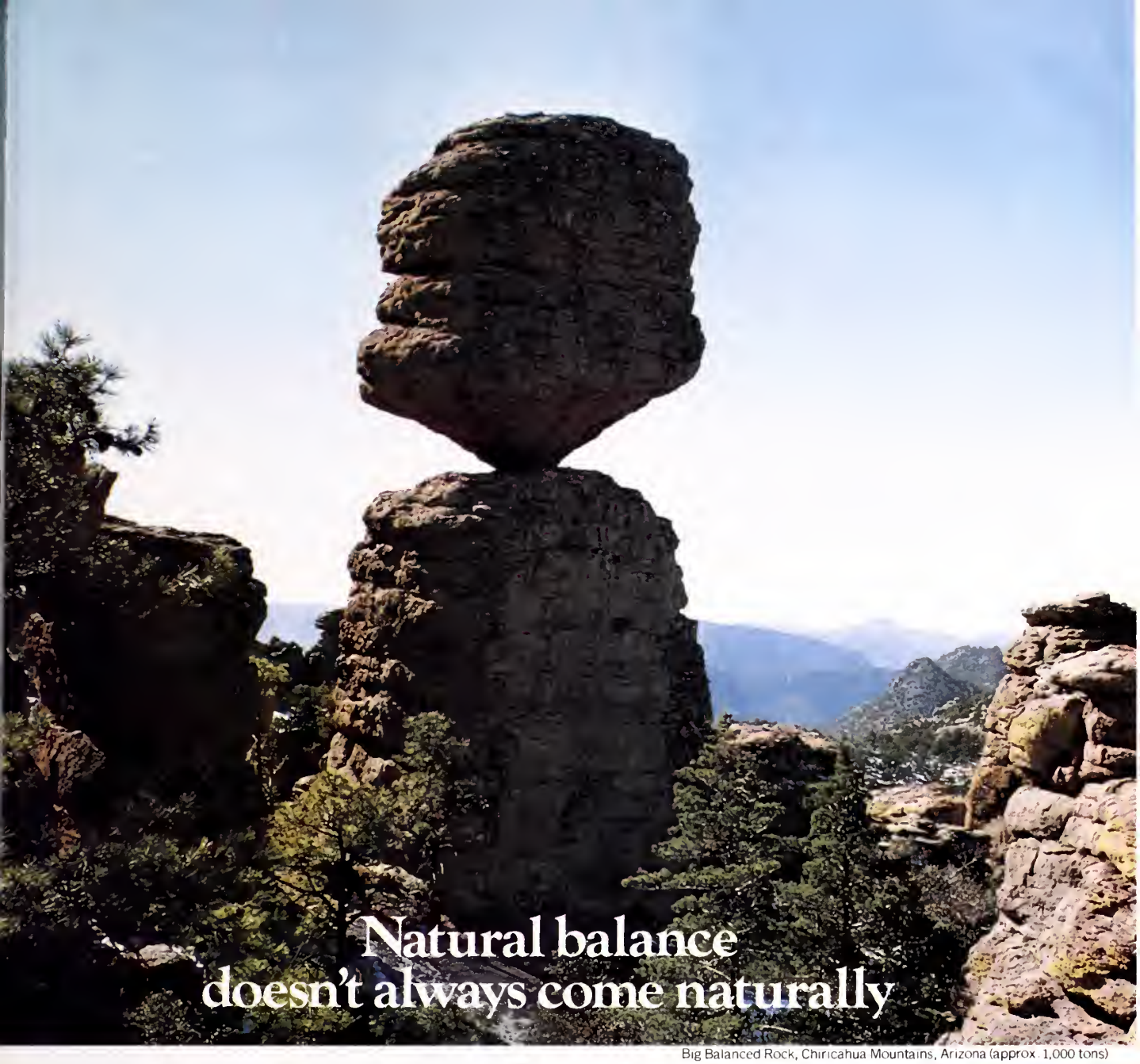
(1) Panel consisting of a physician or hospital administrator, attorney and lay person.

(2) Panel can throw out a patient's claim, order further medical care at no cost to patient or award an unlimited amount of money.

(3) Fund established for physicians and hospitals to provide insurance coverage at reasonable rates. (Funds consists of premiums and annual assessments on physicians and hospitals.) Party using fund agrees to submit to arbitration.

(4) Patients have 60 days after they sign the document in which to withdraw their consent. Patients can then sue through the courts. Physicians, however, cannot withdraw without losing their access to the insurance fund.

So far, 1500 of the state's 9300 physicians have agreed to arbitrate, with 40% expected to be signed up by July. ■



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

- Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
- Can relieve nausea and vomiting often associated with vertigo.*
- Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
- Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
- Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

VISUAL FOCUS ON ACUTE GOUTY ARTHRITIS



Foot of patient with acute gouty arthritis as seen by conventional x-ray.



Scintiphotogram of same foot reflects inflammatory process.

The scintiphotograph on the right shows increased uptake of radiotechnetium polyphosphate in the metatarsophalangeal joint and the proximal interphalangeal joint of the great toe of a patient with acute gouty arthritis. This increased uptake probably results from increased vascularity in the affected areas.

For a more detailed description of scintiphotography, see "addendum" at right.

THERAPEUTIC FOCUS ON

CAPSULES, 25 mg and 50 mg

INDOCIN®

(INDOMETHACIN | MSD)

helps relieve pain and other symptoms of inflammation in acute gouty arthritis in selected patients

INDOCIN is a potent drug with anti-inflammatory, antipyretic, and analgesic properties. It should not be used in conditions other than those recommended. Although INDOCIN does not alter the progressive course of the underlying disease, in selected patients with acute gouty arthritis it has been found highly effective in relieving pain and in reducing fever, swelling, and tenderness.

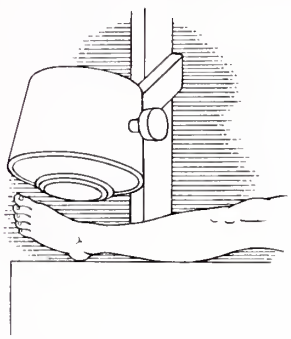
MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please see following page.

addendum

MSD
MERCK SHARP & DOHME

Facts about Scintiphotography



In recent years a variety of radiopharmaceuticals have been employed to aid in the diagnosis of bone and joint disorders. The joint-imaging technique consists of injecting technetium polyphosphate intravenously, and imaging is performed with the scintillation camera two hours after the administration of the radionuclide. In general, for joint surveying, the shoulders, elbows, hands, wrists, knees, ankles, feet, and vertebral column are mapped. The entire scanning process takes approximately one hour. The criterion for a positive image is a higher concentration of radioactivity in a joint region than in adjacent nonarticular bone. In effect, each patient serves as his own control.

INDOCIN®
(INDOMETHACIN | MSD)



helps relieve pain
and other symptoms
of inflammation
in acute
gouty arthritis
in selected patients

IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be considered a simple analgesic and should not be used in conditions other than those recommended. The drug should not be prescribed for children because safe conditions for use have not been established.

Because of the high potency of the drug and the variability of its potential to cause adverse reactions, the following are strongly recommended: 1) the lowest possible effective dose for the individual patient should be prescribed. Increased dosage tends to increase adverse effects, particularly in doses over 150-200 mg per day, without corresponding clinical benefits; 2) careful instructions to, and observations of, the individual patient are essential to the prevention of serious and irreversible, including fatal, adverse reactions, especially in the aging patient.

Contraindications: Children 14 years of age and under; pregnant women and nursing mothers; active gastrointestinal lesions or history of recurrent gastrointestinal lesions; allergy to aspirin or indomethacin.

Warnings: *Gastrointestinal Effects:* Because of the occurrence and, at times, severity of gastrointestinal reactions, be continuously alert for any sign or symptom signaling a possible gastrointestinal reaction. The risks of continuing therapy with INDOCIN in the face of such symptoms must be weighed against the possible benefits to the individual patient. Gastrointestinal effects may be reduced by giving the drug immediately after meals, with food, or with antacids. Use greater care in aging patients.

Ocular Effects: Corneal deposits and retinal disturbances, including those of the macula, have been observed in some patients on prolonged therapy. Discontinue therapy if such changes are observed. Ophthalmologic examination at periodic intervals is desirable in patients on prolonged therapy.

Central Nervous System Effects: INDOCIN may aggravate psychiatric disturbances, epilepsy, and parkinsonism, and should be used with considerable caution in patients with these conditions. If severe CNS adverse reactions develop, discontinue the drug.

Precautions: Blurred vision may be a significant symptom that warrants a thorough ophthalmologic examination. Patients should be cautioned about engaging in activities requiring mental alertness and motor coordination, as driving a car. Headache which persists despite dosage reduction requires complete cessation of the drug. May mask the usual signs and symptoms of infection; therefore, the physician must be continually on the alert for this and should use the drug with extra care in the presence of existing controlled infection. After the acute phase of the disease is under control, an attempt to reduce the daily dose should be made repeatedly until the patient is off entirely.

Adverse Reactions: *Gastrointestinal Reactions:* Single or multiple ulcerations of the esophagus, stomach, duodenum, or small intestine, including perforation and hemorrhage, with fatalities in some instances; rarely, intestinal ulceration has been associated with stenosis and obstruction; gastrointestinal bleeding without obvious ulcer formation; perforation of preexisting sigmoid lesions (diverticulum, carcinoma, etc.); rarely, increased abdominal pain in ulcerative colitis patients or development of ulcerative colitis and regional ileitis; gastritis, which may persist after the cessation of the drug; nausea, vomiting, anorexia, epigastric distress, abdominal pain, and diarrhea.

Eye Reactions: Corneal deposits and retinal disturbances, including those of the macula, have been observed on prolonged therapy; blurring of vision.

Hepatic Reactions: Rarely, toxic hepatitis and jaundice, including some fatal cases.

Hematologic Reactions: Aplastic anemia, hemolytic anemia, bone marrow depression, agranulocytosis, leukopenia, and thrombocytopenic purpura. Since some patients manifest anemia secondary to obvious or occult gastrointestinal bleeding, appropriate blood determinations are recommended.

Hypersensitivity Reactions: Acute respiratory distress, including dyspnea and asthma; angiitis; pruritus; urticaria; angioedema; skin rashes; purpura.

Ear Reactions: Hearing disturbances, deafness, tinnitus.

Central Nervous System Reactions: Psychic disturbances including psychotic episodes, depersonalization, depression, and mental confusion; coma; convulsions; peripheral neuropathy; drowsiness; lightheadedness; dizziness; syncope; headache.

Cardiovascular-Renal Reactions: Edema, elevation of blood pressure, hematuria.

Dermatologic Reactions: Loss of hair, erythema nodosum.

Miscellaneous: Rarely, vaginal bleeding, hyperglycemia, glycosuria, ulcerative stomatitis, and epistaxis.

Note: In patients receiving probenecid, plasma levels of indomethacin are likely to be increased.

Supplied: Capsules containing 25 mg indomethacin each, in single-unit packages of 100 and bottles of 100 and 1000; capsules containing 50 mg indomethacin each, in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your MSD representative or see full prescribing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, Pa. 19486

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editorials
editorials

A Costly Administrator

One of the great outcries of the day is that privately oriented health care is not economical and systematic enough and that the Federal government should spring to the rescue, a la Rin Tin Tin. But how deft is the government (notably the Social Security Administration) in cost management? How qualified is it to administer any program of National Health Insurance? How blameless is it for the expense of Medicare?

Negative answers can be inferred from a recently released study of Medicare Part A cost performance. What makes the study especially noteworthy is its source: the General Accounting Office (GAO), a Federal agency.

GAO compared SSA's performance with that of four private insurance companies in dealing with institutional providers of Medicare services.

The average cost – excluding audit – of a bill processed by SSA's Division of Direct Reimbursement (DDR) was $12.39 in 1973, compared with $7.31 for Travelers, $7.28 for Mutual of Omaha, $3.81 for Blue Cross of Chicago, and $3.55 for Blue Cross of Maryland. The lower costs for the "Blues" were attributed partly to their smaller, more wieldly territories.

Adding to the weight of the findings is the nonpolitical, independent character of the GAO. It is the fiscal watchdog of Congress, though its head (the Comptroller General) is appointed by the President. Its Medicare report was a detailed response to questions put to it by the House Ways and Means Committee chairman.

All of this should be borne in mind in weighing the rebuttals from the Department of Health, Education, and Welfare – and from Max W. Fine, executive director of the Committee for National Health Insurance and prolific writer of sly "letters to the editor" of newspapers.

HEW – and Fine – call the report outdated. But DDR's lack of cost data (GAO had to develop them) could help explain the delay.

So the burden of proof hangs heavy on the SSA. Meanwhile, Congress ought to think hard about the report from its fiscal watchdog. And think hard about making SSA the health-insurance administrator for the public at large, as proposed in such legislation as the Kennedy bill. ■

Preventive Health Care

An oft-quoted homily, especially by laymen, is "physician, heal thyself." In the spirit of that exhortation, a group of 58 male physicians, having referred thousands of patients to physical fitness programs, were tested in the fall of 1975 through a physical fitness program, uniquely entitled "physician, check thyself", to see how they "stacked up" as compared to their patients.

The program was administered by the Physical Education Department at the University of California, San Diego, and the physicians were "put through their paces" with the following tests: resting 12-lead ECG: exercise ECG; body composition analysis; serum lipid level determination; urinalysis SMA 12/60; resting, working and recovery heart rate and blood pressure measurements; smoking habits; aerobic working capacity test and selected pulmonary tests. Also evaluated were anxiety levels and personality, nutritional habits, body strength and flexibility.

The results? The majority were in as poor physical condition as the patients they had referred to the program.

It is reasonable for anyone to think that physicians are as well informed as anyone about the benefits of physical fitness. This may be true particularly in light of the action taken by the AMA House of Delegates during the Clinical Convention in Hawaii (Journal, Vol. 45, No. 7, January, 1976, issue) at which time a resolution was passed urging physicians to "continue to act as non-smoking exemplars to the public" as well as to continue to practice proper health habits.

Perhaps none of the 58 physicians in the test group were present in Honolulu to speak against the resolution, but their test scores clearly refute the intended message of the resolution. Eight-five per cent of the men were found to be physically unfit. Two-thirds were considered to be obese and twenty-five per cent had high levels of hypertension. Only nine of the 58 were on acceptable exercise programs. In the past, it seems that a greater percentage of health care has been remedial in emphasis rather than preventive. Maybe the pendulum is swinging back in the other direction. Eventually the point may be reached that a national awareness campaign of the need to improve physical fitness will consist of more than just an effort to reorient people to exercise, but to a whole new way of life. ■

Revamping of the Caucus

As mandated under MASA's new Constitution, caucuses have now been held in the seven congressional districts and the results have proven to be satisfactory. Groundwork has been laid for those matters which will be presented before the Reference Committees during the 1976 Annual Session in Montgomery.

On Thursday afternoon, April 15, beginning at 2 p.m., members of these Reference Committees will sit to review the caucus material and hear the opinions of MASA members. From these, the Committees will seek to reach satisfactory conclusions which will then be presented before the College of Counsellors and House of Delegates for their action on Saturday morning, April 17.

Counsellors and Delegates are now allowed the time to sit down quietly and together and discern their course of action without feeling pressured by lack of time and the encroachment of the beginning of the ALAPAC luncheon as experienced in past years. The Caucuses have proven their workability. ■



HILL CREST HOSPITAL — For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

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James K. Ward, M.D.

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HILL CREST FOUNDATION, INC.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

PHONE: (205) 836-7201

Letters to the Editor

Rebuttal To A Critic

In reply to Dr. C. E. Butterworth's complicated letter which was published in the *Journal* (January, 1976, Vol. 45, No. 7, p. 17), I would like to answer each topic fully. Basic Science is important in analyzing what we do on a nationwide scale to milk. My two favorite companions are a biochemistry book in paperback and a book on metabolism. These references are informative.

1. Review of Physiological Chemistry, 15th Edition. Harold A. Harper, Phd, Lange Medical Publications Los Altos, California, Co. 1975 - $10.00
2. The Metabolic Basis of Inherited Disease, 3rd Edition by John B. Stanbury, James B. Wyngaarden, Donald S. Fredrickson.
   McGraw - Hill Book Co., Blakiston Division Co. 1972

These two references are a source of information on Xanthine Oxidase as well as metabolism in general. For the hurried reader, I will try to faithfully abstract information that helps me answer my own questions. Basically, I want to know what is going on. I write about what I learn so that others may compare notes with me and sharpen my awareness, as Dr. Butterworth has done.

Xanthine Oxidase (2p 910) is a flavoprotein (1p 174) containing the trace element molybdenum and iron. It is a respiratory enzyme playing a key role in oxidation. In man, it is found mainly in the liver and the lining of the intestine. It's most widely publicized role is in the pathway of uric acid production (1p 387).

Hypoxanthine - XO - Xanthine - XO - Uric Acid. Xanthine Oxidase, the enzyme which oxidizes hypoxanthine and xanthine, has been isolated from milk (1p 387).

In so far as shock language is used in this article, I feel that the end justifies the means. High death rates from circulatory disorders are nothing to be complacent about. It seems that whenever one steps into the Nutrition arena, Pandora's box is thrust open. However, it gives me satisfaction to be able to inform the critics.

I remain your servant.

Jeffrey H. Rudell, M.D.
Community Hospital
Tallassee, Alabama

Journal Improvement

To find a yardstick by which to measure the improvement of the *Journal* is not possible. It is my personal feeling based on many years of reading a wide variety of journals that the upgrading of the *Journal* in the past two years is nothing short of phenomenal.

Earlier, it was my feeling that the *Journal* was to be considered as unworthy of the costs and efforts involved in its being printed. There is always room for improvement, but it is quite laudatory to see the accomplishments which have been achieved by those who manage the *Journal*.

It is a privilege to work with you and be assured of my loyalty for the effort of the individuals who are so dedicated to organized medicine in the State of Alabama and the physicians who are members.

Samuel Eichold, M.D., Director
Office of Continuing Medical Education
University of South Alabama College of Medicine
Mobile, Alabama

Appreciation For Physician Speaker

Our club, The Space City Lions Club, enjoyed the presentation that Dr. Charles T. Moss, Jr. gave us on January 27, 1976.

I would like to thank the Association's Speakers' Bureau personally and on behalf of our membership for the program and hopefully, we can have some more of your programs at our club at a later date.

I am sending you two pictures of Dr. Moss during his presentation. I hope these are sufficient. If I can be of further service to you, please let me know.

Carlos Melville
Space City Lions Club
Huntsville, Alabama ■



"I'll give it to you straight . . . You have a Super-Hernia . . ."



Family Practice At South Alabama

The dean's page for this month is devoted to a description of the evolving educational program in family practice at the University of South Alabama. The College of Medicine hopes that the description by Dr. Henry C. Mullins, Chairman of the Department of Family Practice, will be of interest to the members of MASA.

Dr. Mullins, who has practiced in Fairhope since 1956, has long been active in medical affairs in this state and the University is most fortunate that he has agreed to devote his abundant energies and talents to the development of family practice within the College of Medicine.

Arthur J. Donovan, M.D., Acting Dean
College of Medicine, University of South Alabama

Henry C. Mullins, M.D.
Chairman, Department of Family Practice
College of Medicine, University of South Alabama

The need for family physicians in Alabama, especially in rural areas, is well documented. For many years many of us in this state have been demanding educational and training programs to prepare physicians to meet this need. The establishment of the College of Medicine of the University of South Alabama in 1969 carried with it a commitment to educate and train physicians to meet these needs.

WHAT HAS BEEN DONE?

FAMILY PRACTICE DEPARTMENT:

From the beginning, the organizational structure of the College of Medicine included a full Department of Family Practice, equal in all respects to the other major clinical departments. This Department was activated in April, 1975 with appointment of the first Family Practice faculty member. The Department is amply funded and has an adequate number of faculty positions allocated. Full-time Family Practice faculty are actively being sought and we hope to have six full-time faculty members by September, 1976. The Family Practice Department is well represented on important committees in the Medical School, such as the Dean's Advisory Committee, the Curriculum Committee, Admissions Committee, Continuing Education Committee, long-range Planning Committee.



Dr. Mullins (right) visits with Dr. C. G. Huggins, Associate Dean, in front of the College of Medicine building on the Mobile campus.

ADMISSIONS:

In an attempt to select students who might practice in Alabama in underserved areas, the Board of Trustees of South Alabama requires that 25% of the freshman class be selected from rural Alabama counties. This policy was adopted prior to the selection of the first class in 1972 and continues until the present time.

FACULTY:

Faculty in the basic sciences, as well as in the clinical disciplines, were selected with a consideration of their interest in, and support of, a medical school with a goal of graduating practicing physicians. This attitude is easily in evidence and seems to be as prevalent, if not more so, in the basic science faculty who have a great interest in, and a desire to be involved in the improving of health care delivery.

PROGRAMS:

Undergraduate:

A two-month Family Practice elective is offered in the senior year. The students spend this time in a rural setting with Family Practice preceptors. Beginning in September, 1976, the school will require a four-week Family Practice rotation during the junior year. One-half of the junior students will have had this rotation during the present school year ('75-'76). An introductory Family Practice preceptorship for freshmen is currently in the planning stages.

Residency:

We plan to begin our residency program in July, 1976 with four residents per year. This will be expanded to a total of twelve residents per year by 1979. Construction is planned of a remote Family Practice training site in Baldwin County. A Family Practice Center, to be located in Mobile, is in the beginning planning phases.

THE FUTURE

The University of South Alabama College of Medicine is a conventional medical school with superb young faculty in the usual clinical departments of Medicine, Surgery, Pediatrics, OB/GYN, Psychiatry, Urology, Genetics, etc. which

(CONTINUED ON PAGE 74)

"Kid, this stuff is the bananas."



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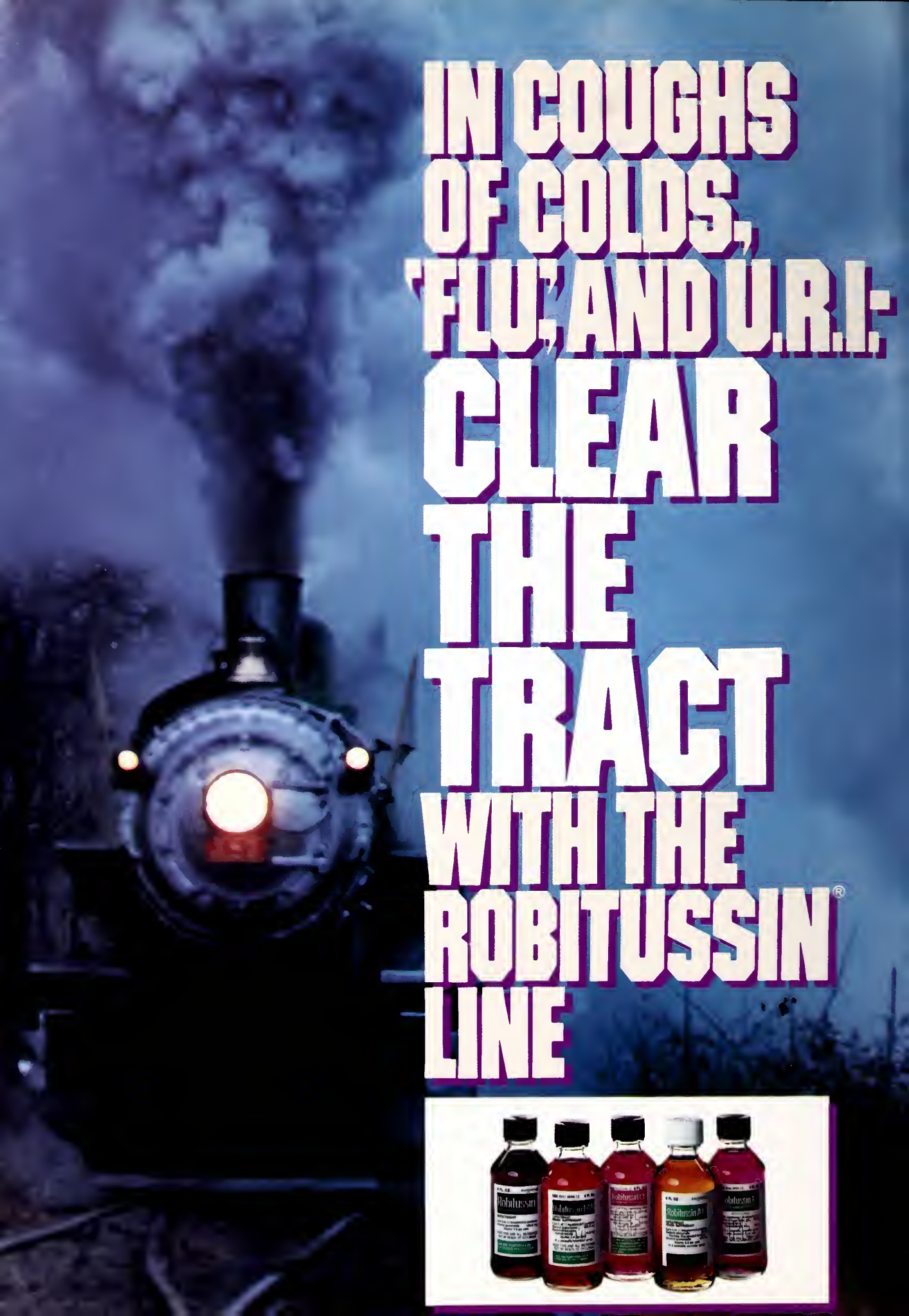
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Powdered opium, USP (equivalent to paregoric 6 ml) (warning may be habit forming)	24.0 mg.
Sodium benzoate (preservative)	60.0 mg.
Alcohol, 5%	

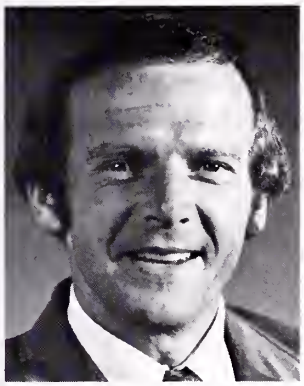
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Wallie R. Carpenter, Executive Director, Jefferson County Medical Society



Physicians Of Jefferson County Society Concerned With Good Patient Relations

It is my belief that one of the major problems in the physician's office today is the proper handling of telephone calls. For most patients, the first contact with the medical practice is through the telephone. The Medical Assistant who answers the call represents your practice and perhaps this person is your most important employee.

In October of 1975, and again in January of 1976, the Jefferson County Medical Society sponsored a Public Relations Seminar for Medical Assistants in Jefferson County. Over 400 Medical Assistants have attended these Seminars.

The very heart of our Seminars was a two-hour session entitled, "You, The Telephone Manager." This session was moderated by Miss Karen Zupko of the AMA and it involved telephone techniques and office management using role-playing case studies and visual aids to help the Medical Assistants handle the disgruntled patients, the patient who demands to see the doctor immediately, and numerous other patient problems.

In the role-playing session, the Medical Assistants actively participate. They act out cast studies outlined in their kits and utilize a Teletrainer which enables the entire audience to hear both sides of the conversation. The group then discusses how a particular case was handled.

Miss Zupko also discusses telephone equipment, how to write your own patient information booklet, and the business side of medical practice.

A big plus of both Seminars was that we were able to have with us Mr. Jack Mooresmith, Legal Counsel with MASA. Mr. Mooresmith added much interest to the session by answering question concerning medical - legal problems and the legal ramifications that exist in specific situations.

I personally feel that our Society is offering a service to its members by sponsoring such a Seminar for their personnel. Establishing a line of good communication with patients is a must and the Seminars were a big step toward establishing a strong doctor-patient relationship. Because of the interest and positive feedback, we plan to repeat the Seminar annually.

As Dr. Herbert Carmichael commented, "It is so refreshing to see so many people interested in pleasing patients." ■



R. E. Wiltsie, M.D., Chairman, Jefferson County Medical Society PR Committee, extended a welcome to seminar attendees on behalf of the Society.





MASA staffers Jack Mooresmith (above) and Larry Dixon assisted in role-playing.

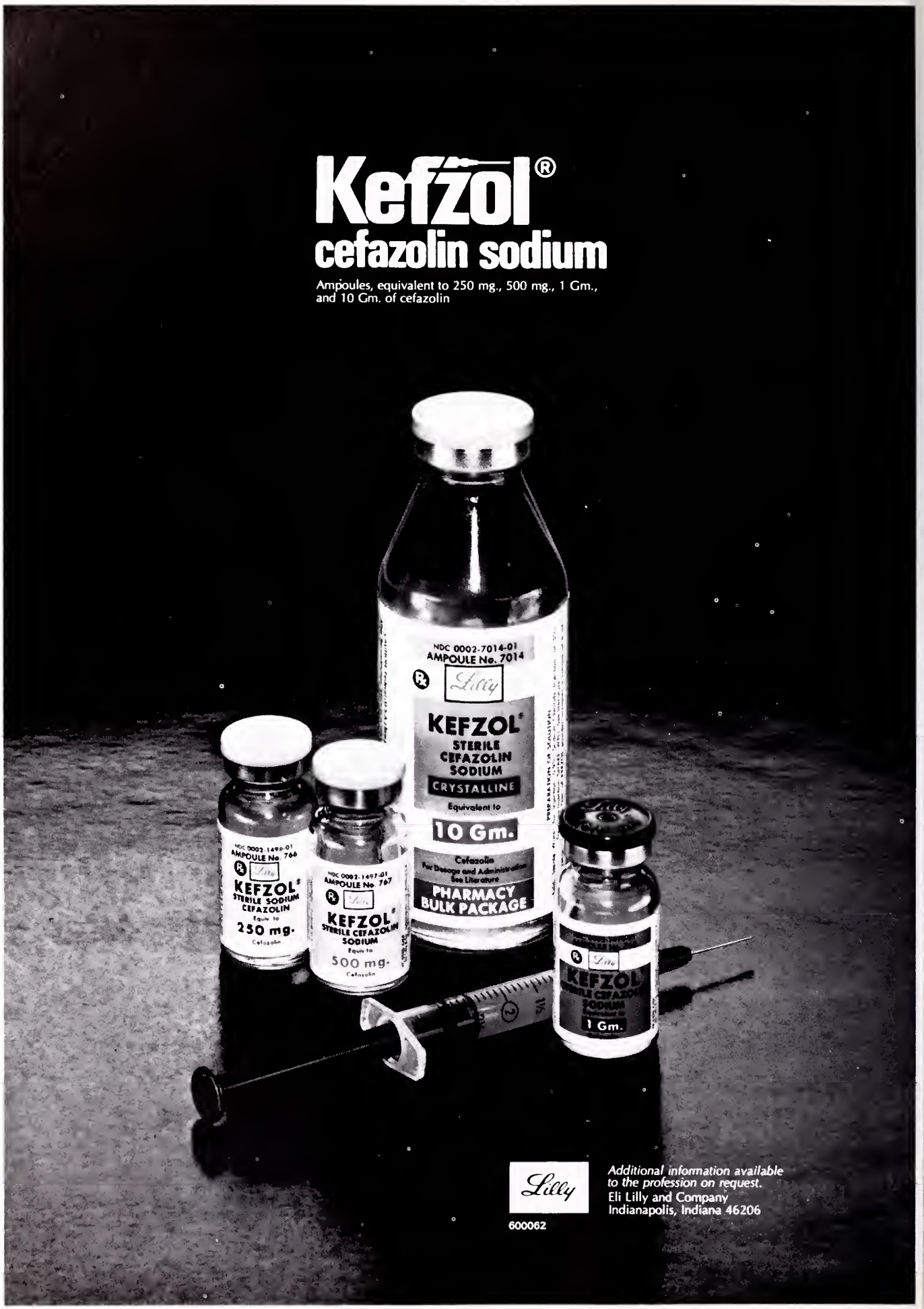




Part of the more than 300 medical assistants who attended the seminar.

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Current Applications Of Diagnostic Ultrasound in the Abdomen

Peter J. Dempsey, M.D.*

Introduction

The ability to image internal abdominal viscera in a noninvasive manner, without the use of patient preparation, contrast agent, or ionizing radiation represents a truly significant milestone in the history of diagnostic radiology. The field of diagnostic ultrasound is growing rapidly, not only in the number of organs being studied routinely, but also in the resolution that can be obtained in particular areas. In contrast to the emission imaging of nuclear medicine or the transmission imaging of diagnostic radiology, medical ultrasound uses reflections (echoes) to form images without the use of any ionizing radiation.

A brief discussion of the physics of ultrasound which is basic to the understanding of the scans obtained will be followed by a discussion of its clinical application in the abdomen. The use of ultrasound in obstetrics and gynecology represents an important topic, but one which is separate and beyond the scope of this discussion.

Physics

The physical principles of medical ultrasound can be conveniently divided into three categories: (1) the production of ultrasound; (2) the nature of the wave form; and (3) the production of images from the echoes.

(1) The Production Of Ultrasound

The basic element in the production of the ultrasound beam is a transducer crystal made from a variety of substances which are piezoelectric in nature. These substances mechanically expand or contract when a positive or negative current is passed across them, and conversely, generate an electrical current when they are mechanically expanded or compressed. The two functions occurring in alternating fashion make it possible for the same element (piezoelectric crystal) to be both the sender (expansion and contraction with an applied current) and the receiver (current production resulting from the mechanical stimulation of returning echoes) in the typical ultrasound unit.

Indeed, the fact that it sends for only 0.1% of the time and receives for 99.9% of the time ("pulsed ultrasound") is largely responsible for the margin of safety that exists. The safety of pulsed ultrasound as used clinically is well accepted.[1,2] The power levels of current equipment are approximately 1,000 times below the level for measurable heat production or cavitation.

(2) The Nature Of The Wave Form

Ultrasound is a standard longitudinal wave form of a frequency between 1 and 10 million cycles per second (mHz). A "medium" is essential for the transmission of ultrasound and mineral oil is commonly used as a coupling agent between the transducer and the skin. For practical purposes, air completely blocks the ultrasound beam used in medical diagnosis.

Because the ultrasound beam and its reflected echoes travel at a constant velocity in the body, the imaging system is able to accurately measure distance. Thus the precise measurement of masses or organs within the abdomen is possible with sonography.

(3) Production Of Images From Echoes

Acoustical impedance (z) is defined as the product of tissue density (t) and the velocity of sound in tissue (v). The passage of the ultrasound beam (the longitudinal wave form) from a tissue of one acoustical impedance to a tissue of another acoustical impedance produces an echo. The strength of the echo produced is proportional to the difference between the acoustical impedances being traversed. The echoes are reflected back to the piezoelectric crystal in the transducer which produces a current proportional to the strength of the echo. This echo is then recorded on a cathode ray tube or television system as a visible image.

The display used in abdominal ultrasound is the B scan shown in Figure 1. In this form, an acoustical tomogram is produced.

One of the principle contributions of ultrasound in the abdomen, other than organ outline and definition, is determining whether a structure is cystic or solid. Figure 2 depicts how a normal liver, one containing a cyst and one containing a solid lesion would appear on a sonographic B scan. A "low gain" setting in ultrasound may be compared with a "narrow window" setting in nuclear medicine.

Only the strongest echoes (highest energy photons) are received and contribute to the image. Thus, only the major surfaces of the liver produce echoes, and its homogeneous parenchyma appears "echo-free" or sonolucent. At "high gain" or "wide window" settings, some of the lower

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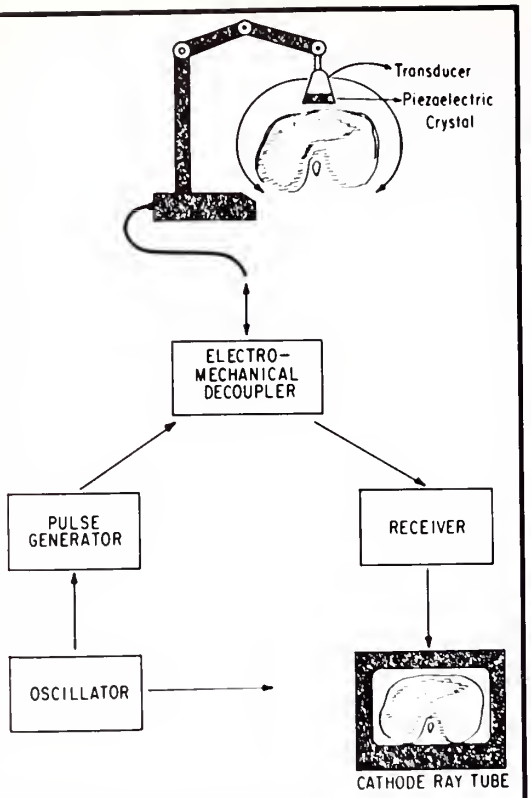


FIGURE 1: Schematic drawing of the equipment used in the production of an abdominal B scan. A cross-section of the liver is depicted.



FIGURE 3: Sagittal, supine view of the abdomen with the patient's head to the left. A normal caliber abdominal aorta is seen, above which are the superior mesenteric artery (lower arrow) and the obliquely running portal vein (upper arrow).

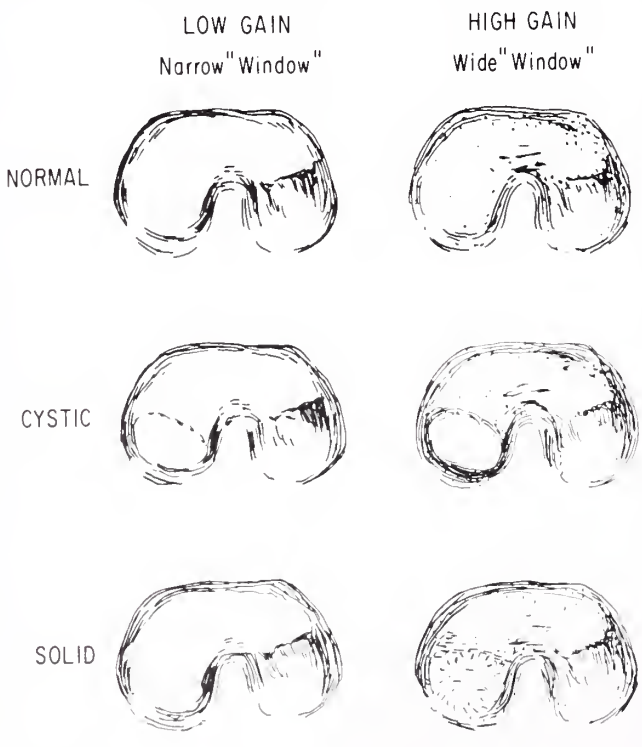


FIGURE 2: Schematic drawing showing a transverse B scan of a normal liver, one with a cystic lesion in the right lobe, and one with a solid lesion in the right lobe.

strength echoes (lower energy photons) and scatter contribute to the image. A cyst remains clear (sonolucent) as there are no internal echoes in the fluid. Tumor tissue or normal liver parenchyma, however, contains internal echoes.

It is not sufficient to merely define or demonstrate the technical capabilities of abdominal ultrasound. More importantly, the clinician should be aware of the current position which diagnostic ultrasound should occupy in the evaluation of various clinical entities. To facilitate this, the discussion may be conveniently divided into three general categories.

I. Definition Of Organ Anatomy

In many instances, the simple description of an abdominal viscus as to its size and configuration may be all the information necessary to make a clinical decision. If a non-invasive modality such as ultrasound can provide this information easily and accurately, a more invasive provedure may often be obviated. An excellent example is the abdominal aorta.

Figure 3 depicts the abdominal aorta and two other vascular structures which can frequently be imaged. (Note: In all sagittal scans, the convention will be to have the patient's head to the left of the illustration. The transverse scans show the patient as if one were looking from the feet

to the head. Thus the right side of the patient's abdomen will be on the left side of the illustration.)

Figure 4 shows a case in which there was fusiform dilation of the distal abdominal aorta. Using the centimeter reference marks, the exact dimensions in both sagittal and transverse projections may be obtained and the presence or absence of an aneurysm easily documented.

There is a distinct advantage of sonography over conventional arteriography in the diagnosis of aneurysms. Sonography will image the aneurysm in its entirety, clot as well as patent lumen.[3] At angiography, a contrast column of virtually normal caliber may be seen with large aneurysms because of the presence of laminated clot.

If a small aneurysm is present and the patient is followed medically, the sonogram may be repeated at any desired interval on an outpatient basis. Many feel that sonography is now preferred in objectively documenting and following abdominal aortic aneurysms.[4]

Another example of the importance of defining organ size involves the patient admitted in renal failure. It is often critical to know whether the patient's kidneys are small or large. Unfortunately, visualization by intravenous urography is difficult. In less than ten minutes, however, with no patient discomfort, clear visualization and accurate measurement of the kidneys may be obtained by sonographically scanning the patient sagitally and transversely in the prone position (Figure 5).

The pancreas has traditionally been an organ which has defied most methods of imaging. As can be seen in Figures 6, and 7, it is now possible to visualize the normal pancreas in a great majority of patients.[5,6] It is almost always possible to determine if a pancreatic mass is cystic in nature. Thus, it is feasible to serially follow pseudocysts of the pancreas at frequent intervals non-invasively. The objective documentation of enlargement, stabilization, or even disappearance of pancreatic pseudocysts is extremely important in the safe and efficient surgical management of this process.



FIGURE 4: Sagittal, supine view of the abdomen showing the abdominal aorta. There is fusiform dilation of the distal portion (arrows) at a level just above the umbilicus (external mark above the patient's abdomen). Liver edge is seen at the left above the aorta.

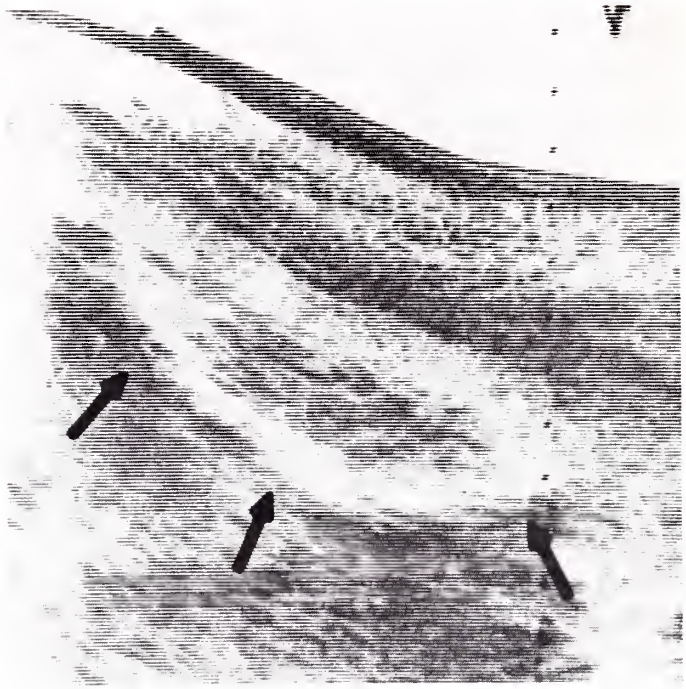


FIGURE 5: Sagittal view of the left kidney taken with the patient lying prone with his head to the left of the illustration. Arrows outline the outer edge of the cortex. Echoes produced by the calyces are seen centrally.



FIGURE 6: Transverse view of the abdomen showing the head of the pancreas outlined by the arrows. The gall bladder is seen just to the side of the pancreas with liver above and right kidney below.



FIGURE 7: Transverse abdominal scan with arrows outlining the body and tail of the pancreas in the same patient as Figure 6. The right kidney with the central calyceal echoes is seen beneath the right lobe of the liver. The aorta is seen directly below the pancreas and above the vertebral column.

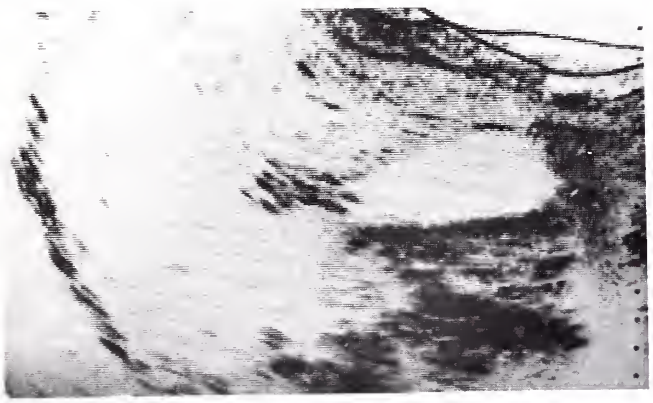


FIGURE 8: Sagittal view of the abdomen 6 cm. to the right of midline showing the gall bladder projecting beneath the liver parenchyma. The diaphragm can be seen at the left margin of the image.



FIGURE 9: Sagittal view of the right side of the abdomen showing a stone lying along the posterior aspect of the gall bladder. The arrows outline the acoustical "shadow" cast by the stone as it attenuates the ultrasound beam.

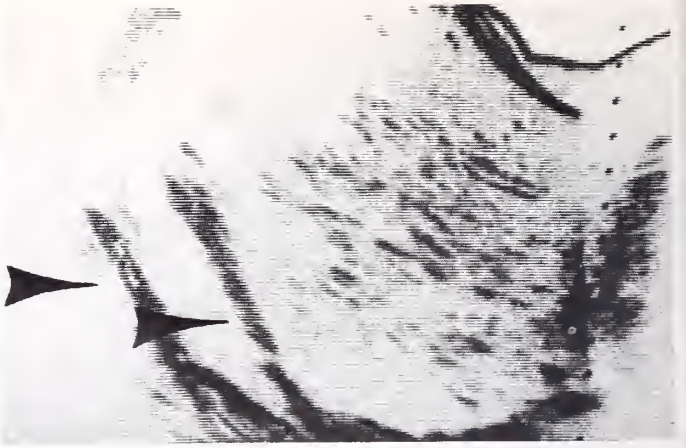


FIGURE 10: Sagittal view of the abdomen to the right of midline through the liver. The arrows illustrate how the diaphragm may be imaged in inspiration and expiration.

Visualization of the gall bladder can be accomplished in most patients with little difficulty. Figure 8 shows the appearance of the normal gall bladder in sagittal view. Figure 9 shows a gall bladder in sagittal view. Figure 9 shows a gall bladder containing a stone. It should be noted that the patient with the gallstone had a normal abdominal film and non-visualization by oral cholecystography. Surgery confirmed the diagnosis.

In instances where a right upper quadrant abscess is suspected, or where a right pleural effusion obscures visualization of the diaphragm, ultrasound may provide a way to not only image the right sub phrenic area, but also to objectively record diaphragmatic movement (Figure 10).

II. Unknown Abdominal Mass

During the neonatal period, a reliable, non-invasive means of imaging can be a valuable clinical tool.[7] An ultrasound scan was done in a seven-hour-old infant in which a left-sided abdominal mass was palpated at birth. The sonogram was performed in ten minutes with no premedication showing a cystic left renal mass. This information supplied by ultrasound reduced the differential diagnosis to two entities: congenital multicystic kidney or a hydronephrotic kidney from congenital ureteropelvic junction obstruction, both surgical lesions. An intravenous urogram documented normal function on the right and surgery followed with removal of the multicystic kidney.

In many instances, knowledge that an abdominal mass is cystic rather than solid greatly shortens the diagnostic evaluation of patients, as the differential diagnosis often becomes limited to a few entities. In some instances, surgery may be avoided entirely, as illustrated in Figure 11. This middle-aged woman entered with a large right-sided abdominal mass of unknown etiology. Sonography clearly showed a solid mass lesion within the liver. A percutaneous liver biopsy revealed a highly anaplastic metastatic lesion. Surgery was therefore not necessary.

Figure 12 shows the sonogram in another unknown abdominal mass. This 18-year-old female noted a right-sided abdominal mass which had given her steadily increasing vague abdominal discomfort. Laboratory work was within

normal limits. An ultrasound examination showed the mass to be cystic, with numerous internal septations, occupying the location of the right kidney. A normal left kidney was seen. The interpretation of a markedly hydeonephrotic kidney was confirmed at surgery by the presence of a 27 cm. hydronephrotic kidney with a congenital ureteropelvic junction obstruction.

III. Serial Examination Of A Known Mass

Ultrasound provides a simple, painless, non-invasive method of obtaining reproducible, objective data about the size and configuration of mass lesions. Furthermore, this can be performed on an outpatient basis without patient preparation. The ability to document the response of a tumor to radiation or chemotherapy is an obvious desirable capability.[8]

Another example previously cited but needing emphasis is the ability to follow the course of small abdominal aortic aneurysms with objective size measurements.

A third common situation to be emphasized is the diagnosis and follow-up of pancreatic pseudocysts. Most surgeons prefer to follow these for a period of weeks to allow them to "mature" before performing a drainage procedure. Sonography provides an imaging system which by its very nature is extremely adept at documenting and measuring cystic structure.



FIGURE 11: Sagittal view of right side of the abdomen 7 cm. to the right of midline. The rounded intrahepatic tumor is seen bulging down from the liver parenchyma (lower three arrows), and compressing the right kidney lying beneath it (back margin of kidney is outlined by the three arrow heads).

Summary

The current technological revolution in medical imaging systems is typified by the field of abdominal ultrasound. Although dramatic results have already been achieved, it is felt by many that this represents merely the infancy in the growth of a new and exciting facet or organ imaging. For instance, there are now "real time" ultrasound scanners available with scanning elements comprised of an array of multiple transducers activated sequentially. The moving picture obtained resembles a fluoroscopic image showing in great detail the movements of structures such as the cardiac valves, the aorta, or even a fetus in utero. Indeed, the cardiac activity of the fetus itself has been easily seen with real time instrumentation. It is emphasized, again, that no ionizing radiation is involved.

For the clinician, diagnostic ultrasound represents a new and extremely useful method of imaging. In many instances, it actually supplies data unavailable from conventional radiographs pertaining to tissue consistency. It is painless and non-invasive, without ionizing radiation. It can be performed on an outpatient basis without preparation. It is a method which, when included in its proper place in the medical armamentarium, has the potential to efficiently shorten the diagnosis, treatment, and follow-up of abdominal disease.

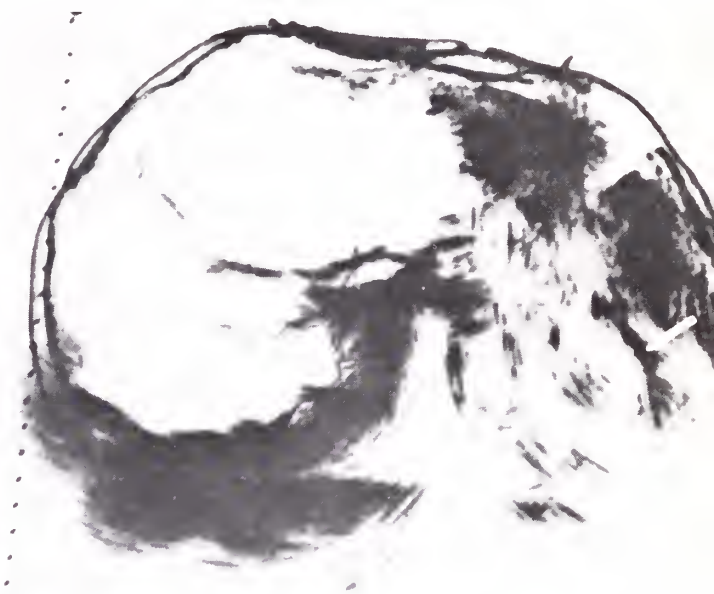


FIGURE 12: Transverse view of the abdomen at a level 5 cm. above the umbilicus. The normal left kidney is shown by the arrows. The huge, hydronephrotic right kidney is easily seen occupying virtually the entire right side of the abdomen.

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Barbiturate Endarteritis Of Foot

T. Nagendran, M.D.*



FIG. 1



FIG. 2



FIG. 3

SKIN DISCOLORATION ON ADMISSION

The damaging effects produced by intra-arterial injections of barbiturates were first described in 1942 by Van der Post[1]. Since then there have been many similar reports in the surgical literature[2,3]. Most of the earlier reports were in reference to accidental intra-arterial injections which occurred in the operating room during anaesthesia. However, recently this tragic condition is being seen in the emergency wards because of increasing frequency of self medication by parenteral routes[2].

The following case of intra-arterial injection of nembutal (pentobarbital) was seen at Veterans Administration Hospital, Tuskegee, Alabama.

Case Report: This 39-year-old caucasian male, a chronic drug user attempted to inject nembutal (the amount and concentration not known) on March 17, 1975 into the dorsal veins of his right foot. After repeated attempts, he finally succeeded in injecting into a blood vessel. Immediately following injection, the patient experienced severe pain distal to the injection site. The foot became edematous in two hours. The next morning the patient went to see his local doctor who hospitalized him. No treatment was given and the patient was subsequently transferred to the VA Hospital on March 21, 1975.

On admission, the patient was found to have four needle marks over the dorsum of the foot. He had good dorsalis pedis pulse proximal to the injection site. There was bluish discoloration over medial three and a half toes and this was more extensive over the plantar surface (Figs. 1, 2, and 3). Foot was warm, but toes were cold. The neurological examination was within normal limits. The patient denied any previous history of peripheral vascular disease.

The initial management included bed rest and analgesics. The discoloration improved markedly in the next 24 hours. The skin color continued to improve except at the tips of the toes. After four weeks, the tips became gangrenous and amputation of the distal phalanx of the big toe and the debridement of the next two toes were carried out (Figs. 4, 5, and 6). The patient recovered uneventfully.

Comment: To the best of our knowledge, this is the first case of barbiturate endarteritis of foot reported in English literature. The immediate intense pain distal to the injection site is pathognomonic of the intra-arterial injection. The gangrene is caused by the intra-arterial thrombosis secondary to one or all of the four factors (Table I). Most of our knowledge in this regard comes from experimental animal studies using thiopentone sodium. Barbituric acid is not readily soluble in water. Sodium barbiturate dissolves in water forming an alkaline solution (pH 10-11).

Waters[4] determined that at room temperature with pH of 7.4 the solubility of thiopentol sodium exceeds 1cc/min, there would be precipitation of acid crystals with the blood flow of 50 ccs or less.

Stone, et al[5] pointed out the resulting chemical endarteritis is not pH related but appears to vary directly with

Table 1

Causes of Arterial Blockage

1. Arterial blockage from precipitated barbiturate acid crystals.
2. Chemical Endarteritis
3. RBC Hemolysis
4. Platelet Aggregation

*Staff Surgeon, VA Hospital, Tuskegee, Alabama.



FIG. 4

THREE MONTHS AFTER AMPUTATION



FIG. 5

concentration of solution. All the cases of gangrene from intra-arterial barbiturate injection resulted from the solution greater than 2.5% concentration[2]. Brown, et al[6] demonstrated that when 0.75% solution of thiopentol is added to equal amount of blood it will cause RBC hemolysis and platelet aggregation.

Whatever may be the mechanism, the ultimate result is intra-arterial thrombosis. So the management recommended is directed to prevent further thrombosis and to improve collaterals (Table 2). Arteriogram is helpful in localizing and defining the extent of lesion. Heparin and sympathetic block in the immediate postinjection period may reduce the extent of gangrene[2]. The amputation is done only after the gangrene is well demarcated.

Conclusion: A case of barbiturate endarteritis of foot is presented. The literature is briefly reviewed regarding the pathogenesis and management of barbiturate endarteritis.

The author's statements and conclusions are the results of his own studies and do not necessarily reflect the opinion or policy of the Veterans Administration.

Acknowledgement: I would like to thank Medical Illustration Service for their cooperation in furnishing photographs. ■



FIG. 6

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Table 2

Management of
Barbiturate Endarteritis (6A's)

1. Arteriography
2. Anticoagulants
3. Autonomic nerve block
4. Analgesics
5. Allow sufficient time for gangrene to demarcate
6. Amputation



a COMPREHENSIVE CHILDREN'S PROGRAM

An Address to the Regional Meeting of the Alabama Chapter, American Academy of Pediatrics, Joe Wheeler State Park Resort, Nov. 22, 1975
by HERSCHEL P. BENTLEY, JR., M.D.

In the past, Pediatrics, as a specialty, has been struggling with the best means to provide comprehensive *medical* care for children. However, it has become increasingly obvious that we can no longer think of purely comprehensive *medical* care for children because potential children's problems extend so much further than what we have considered pure medical needs. To meet the child's medical, emotional, learning and physical needs from fetal life through adolescence, a coordinated comprehensive child care program must be developed to allow all children to develop to the best of their ability.

It would seem to be a tragedy for a child not to develop to the utmost of his or her ability simply because the effort was not made to provide the means of attaining full capability regardless of social status, income or residence in a metropolitan or rural setting. Children should not be limited in achieving their full potential because of limitations imposed by lack of effort or originality on the part of adults.

Out initial goal has to be to develop a program with enough scope so it will meet all the problems that one can envision children having and then devise a way to implement it. Initially, the geographic area of implementation should probably be small with definite plans to expand the program to include the entire State of Alabama. Then decisions must be made concerning who is going to offer the needed services that have been identified, where the personnel to staff the service organizations are coming from and how it is going to be funded.

Initially, I would like to describe my personal view of where a university medical school fits into such a program. I feel very strongly that a university program should not become too heavily committed to operating pure service programs. I feel that this is much better accomplished by agencies and personnel who are dedicated to offering a particular service and making it available where it is needed. Too often university programs allow themselves to become enmeshed in service programs which saps all of the time and energy of the faculty and the university programs hover on the brink of financial chaos because they then seem to become responsible for all of the indigent patients.

Also, it appears that the university programs usually become very inefficient in offering pure service and are more costly. It seems much more feasible for university programs to work in conjunction with the groups offering services so that as the university faculty teaches students they naturally increase the extent of the service programs but they are also able to improve the quality of the service by increasing available personnel, equipment and perhaps expertise. At the same time, the university is not burdened with the constant erosion of faculty time by unending hordes of people desiring the services which will help solve their particular problems.

The purposes of a medical school are traditionally compared to a three legged stool. The three legs are research, service and teaching. If one leg gets too long or is missing, then the stool does not sit level. It is one of the duties of a medical school faculty to develop research programs to explain how the human organism works. Then once this is understood, the deviation from that normal process, which we call disease, can be better approached and brought back to normal. Once that process of bringing the altered physiology to normal, what we ordinarily deem a cure, is mastered, then that process should be immediately taken to all of the community hospitals and put into practice on the general population.

It is not the University's function to horde that information and technique within the confines of a university medical center but to be sure that it is released and utilized immediately. The duty of the faculty is then to move on to other unanswered questions, design experiments to answer them and come up with new concepts of diseases processes.

Likewise, it is the duty of the medical and educational community to be willing to accept the new ways of approaching problems and apply the newer concepts. This brings to the forefront another aspect of the university responsibility. This is teaching the individuals who have already graduated and are practicing on a day-to-day basis. Entirely new methods of getting information to the practitioner have to be developed so these new concepts can be utilized immediately.

Therefore, taking all of these remarks into consideration and to attempt to meet all of these problems, we propose to develop a child comprehensive health care program which will involve all of the resources for child care available within Mobile County, Alabama. This can serve as a prototype so that eventually such comprehensive child care can be organized and made available for the entire State of Alabama.

One person has to be responsible for the overall care of any child and this should be the child's physician. If we adhere to the recommendations of the Academy of Pediatrics concerning primary care of children, then this should be the pediatricians in the State of Alabama. Therefore, the backbone of this comprehensive care program has to be provided by the practicing pediatricians and their professional colleagues in their delivery of care to children.

In Mobile County there are three groups of general pediatricians, who are full members of the faculty of the University of South Alabama College of Medicine, that provide the bulk of the medical care for the Mobile area and serve as the primary medical consultants for this area in Alabama, Mississippi and West Florida. Their relation to the teaching program of the Department of Pediatrics of the School of Medicine is unique to my knowledge.

In the junior medical student teaching program, these physicians provide entirely all of the out-patient teaching. It is our way of insuring that the students are exposed to the everyday problems encountered by the pediatrician and are, thus, taught by the people who deal with it most often.

We are also endeavoring to move our subspecialty medical programs into the private office setting. Presently all of the hematology-oncology, cystic fibrosis and pulmonary patients are seen in the private office setting with all the necessary equipment for evaluating such patients located in the private office. The pediatric house officers and medical students see the patients along with the pediatric faculty in this teaching program. That equipment which is needed for teaching in these clinics is furnished by the University of South Alabama.

The bulk of the patients from these faculty members are hospitalized at the University of South Alabama Medical Center and are cared for by the house officers and students on the pediatric in-patient service. The remaining faculty of the Department of Pediatrics with subspecialty expertise provide consultant services to these physicians.

Our problem is that as well as this program works from both educational and service aspects, there is no possible way that these dedicated physicians can expand to provide primary care to all of the children of Mobile County. Therefore, there is a large group of children in Mobile County who do not receive this type of primary care.

It is proposed as an initial step that the Department of Pediatrics of the University of South Alabama take a look at the needs of the children in Mobile County, Alabama. Then the pediatricians in the county can come together and very carefully evaluate the problems and decide on a plan of action. If the present groups believe that they can expand their programs to meet this need, then that is the obvious solution to the problem. If it becomes obvious that other pediatricians are going to have to be brought in to solve the needs, then the Department of Pediatrics can help recruit pediatricians to set up private practices in other areas of metropolitan Mobile and the rural areas of Mobile County to provide primary medical care to children in these areas.

The feasibility of recruiting these pediatricians will be enhanced with the selling point that they will not only be in the private practice of pediatrics but will serve as instructors for medical students, pediatric residents and preceptors for pediatric nurse practitioners. They will be recruited with the understanding that they will be part of the University teaching program and part of a unique comprehensive medical care program that operates with complete dependence on the private practice of pediatrics.

This program will also enhance the continuing medical education of these physicians. Because they are teaching they will be stimulated to read more. However, because they are part of the teaching programs they will be participants in all the university seminars, etc. It may be necessary to accomplish this through closed circuit television for faculty members in the most distal portions of Mobile County.

This plan automatically removes the establishment of "clinics" where faceless people are seen and the absolute



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essential of one to one physician-patient rapport and continuity of care is lost. The university's sole monetary contribution to these practices will be compensation for the time spent in teaching. The quality of the medical care will be assured by the type of individual recruited and the standards of care expected of a university teaching program. Not only will this bring pediatric care to these rural areas, but it will allow us to have inviting opportunities open for our own pediatric residency program graduates to enter.

This should also allow us to expand our available pediatric training positions as more desirable openings will be present for them to take. These physicians then can take on many of the responsibilities of well baby care now having to be shouldered by the Public Health Department and be reimbursed for these services through the Public Health Department by various child health care grants such as the Maternal and Infant Care Project.

Each of these office practices will truly be comprehensive in scope. They will contain physicians, pediatric nurse practitioners, office personnel, etc. In addition, they will be equipped for visual and auditory screening, metabolic disease screening and have an office laboratory. On a regular basis, psychologists will visit for consultation with parents and patients and arrange for further testing and follow-up if necessary. Likewise, an individual with expertise in learning disorders will visit the office on a regular basis for coordinating the placement and correction of children with learning disabilities.

With the primary care problem thus being met, then the co-existent medical programs have to be strengthened and made available. Children with medical and surgical problems requiring very specialized care must have access to the necessary programs that will care for particular problems. This means further recruitment of subspecialty physicians who will develop specialized service programs of excellence. This may be faculty of the School of Medicine who devote the bulk of their time and efforts to solving the unanswered questions in these specialized areas through research.

Or, the faculty recruited in these service areas may be faculty recruited to fill service needs but operating in a totally private practice situation with a full faculty appointment and teaching responsibilities. We already have faculty members who fit this category. Again, the university's financial commitment to an individual in the latter capacity would be solely for the time spent in the teaching role.

Other co-existent programs will be needed and a great number will be furnished by service programs already existing in the Mobile County area. These will include behavior problems, educational problems including children with special senses defects, learning disabilities, speech and hearing problems, etc. An example of unmet needs in Mobile County is a program for the slow learner. I am not familiar with other parts of the State, but I imagine most school systems are in the same situation. There are programs for the truly mentally retarded, the normal child and the gifted child but nothing for the dull normal child. These children do not need to be in a program for the mentally retarded, but they are not able to keep pace with the normal child. They soon begin to sift through the cracks in the educational system and become the non-performers.

In the 10th, 11th and 12th grades, one finds these students in classes labeled as communicative skills or basic English where an attempt is being made to get them to read at a 3rd or 4th grade level. This automatically dooms them to a life of non-productivity because without being able to read, one can become skilled at almost nothing except purely physical things. It would be much better if these slow learners were identified early so that they could be placed in special learning programs and be taught to perform to their capabilities. Then there is hope in their future.

As we are able to get this program moving in Mobile County, we can then begin implementing the same program in other adjacent counties. The same services can be organized there except where there is not sufficient need to justify establishing such a program in that county. Then, these specialized problems would be treated as part of a regional program.

Rapidly we should be able to expand this program through the State of Alabama so that we will have identified all of the services available and all of the service needed. The same plan would follow to establish local services where it is feasible or regional services where it is not feasible. By this method we should easily identify the needs of the State and establish a reasonable number of regionalized centers based on established needs and not divided according to some geographical whim. I can visualize different numbers of regional centers depending on the problem involved. For instance, there may need to be only one center for the entire State for renal transplants but multiple centers for intensive care nurseries. Therefore, in our concept of this care program, it is important that we don't inform inflexible ideas early, but remain very loose in order to establish a program that is workable.

When the regional plans become operational, then a central referral point for each region can be established in order that each child is assured of being carried through all

"o meet the child's medical, emotional, earning and physical needs...a coordinated omprehensive child care program must e developed to allow children to develop o the best of their ability."

the different agencies needed to solve his or her problems. If a child presents with a multiplicity of problems, there is a need for a point where the referring physician can call, identify all of the known problems and have a central focus coordinate this child's comprehensive care throughout all the maize of agencies that may be involved.

As this plan evolves, one can then begin to better identify the needs that must be met in the regional centers. This will include physical facilities, very specialized in-patient and out-patient procedures, equipment, space, etc. Thus, women's - children pavilions will probably need to be constructed in several areas to meet these needs. This planning, however, can be made on a rational basis of clear identification of needs.

Another obvious problem which must be met is the manpower to meet all of these needs which are going to be identified. This not only includes physicians but specially trained nurses, educators, paramedical personnel, etc. This becomes one of the university's principal problems. Educational programs must be designed, implemented and the students recruited to fill the vacancies and ever expanding openings as the program enlarges and improves. This will entail expanding the pediatric residency program, establishing new pediatric nurse practitioner programs, educational programs for nurses to work in intensive care units, laboratory technicians, respiratory therapists, x-ray technicians, etc.



It may be necessary to establish a training program for individuals going into small hospitals to receive training in all aspects of allied health care in order to meet the needs of small hospitals. This would aid recruitment of physicians into small towns as the services will be available to allow them to practice the type of medicine they would like. In this manner, as we expand our regional programs we will have the personnel to fill them.

Purely medical personnel will not be sufficient however. Special educators, speech pathologists, teachers of the deaf, psychologists, etc., will be needed to fill expanding requirements in these new areas. These educational programs will definitely have to be expanded throughout the colleges and universities in the State.

The most profound problem is how to organize and get all of the programs funded. This will require some help from private foundations and Federal granting agencies to get the program coordinated and begun, but eventually it must become a problem the State of Alabama must face. To help to promote this concept and to present solutions to the problem to the State government, we should organize the Alabama Chapter of the American Academy of Pediatrics into a Child Advocacy Committee. This would be an organization of the pediatricians and other professionals in the State of Alabama who will study the established needs of the children of the State of Alabama and present a positive plan to solve these problems over a definite period of time. The first step will be to identify the needs in order to provide comprehensive care in the State. We have many programs available that physicians are not aware which will already meet many of these needs. Simple coordination and information dissemination may solve much of these needs. To accomplish this we may want to propose the establishment within the State government of a Children's Medical Services which would have responsibility for all State programs dealing with child health.

This Child Advocacy Committee can appear at all legislative hearings having to do with children and offer positive advice and guidance through a thorough knowledge of the needs of children. The pediatricians will truly become advocates of children's care. They, of course, will work in close liaison with all groups established to look after children's special problems and can add weight to expressing the special needs of children in the educational fields. It is expected that solutions to no problems will be arrived at unilaterally, but will come after thorough deliberation by representatives from all professional areas involved such as the medical, dental, educational and sociological professions. ■

The Medical Association of the State of Alabama gratefully acknowledges the contributions of artwork by the children in Mrs. Rose Farris' First Grade Class, Flowers Elementary School, Montgomery, Alabama, for use in illustrating this article. Special thanks to Eric for his drawing on our front cover. ■

Pediatric Grand Round

PRINCIPAL DISCUSSANT: DR. RAYMOND D. A. PETERSON

Case Presentation:

This is the first UAB Medical Center admission for this two-month-old, white female baby who was admitted with a chief complaint of apnea. The child was born weighing three lbs, in the Mobile Infirmary where it had an unremarkable course of approximately five weeks. The child subsequently was well at home until the night prior to admission when the mother noticed some decrease in the baby's normal activity. The child had two episodes of momentarily stopping breathing, but started back in a matter of two or three seconds. The child was seen after each of these attacks and a normal physical examination was seen subsequently. The child had an episode where its legs stiffened, its eyes rolled back, and its color changed to a dark blue. The child also vomited at this time.

The child was admitted to the Mobile Infirmary. A lumbar puncture was done on admission which showed 20 mononuclear cells/cu.mm. with 10% polys, 44% RBC's. Protein was 83 and sugar was 23 with blood sugar of 33 mgms% at that time. White blood cell count on the peripheral blood was 14,000/cu.mm. with 15% polys, 51% bands, 5 monos and 25 lymphs. Platelet count was normal and hematocrit was 31. During an apparent resuscitation effort at home, the mother reported that the child's right jaw was apparently bruised. The chest x-ray showed patchy, bronchial pneumonia in the left upper lobe with an old healed fracture of the right 7th rib. Because of continued apneic episodes in the Mobile Infirmary, the child was transferred to the USA Medical Center and placed in the Intensive Care Nursery for evaluation and treatment.

PAST MEDICAL HISTORY: Past medical history is unremarkable.

REVIEW OF SYSTEMS: Review of systems was negative.

PHYSICAL EXAMINATION: Physical examination revealed a two-month-old, white, female infant with irregular respirations, breathing rapidly for a few minutes and apneic for approximately 30 to 40 seconds. A fall in heart rate occurred during the apneic episodes to about 100, then there would be a spontaneous recovery of respirations. HEENT: A colorless, firm, edematous area was on the right side of the neck extending from the mandible down to the clavicle. There was no darkening color change in this area. Palpation of the jaw bone revealed no fracture. There was good range of motion with the head. Lungs had good breath sounds and clear to percussion. Heart exam showed a I/IV systolic murmur at the left sternal border with good heart sounds and good peripheral pulses. Abdominal exam revealed good bowl sounds, was non-tender with no masses. Genitalia was normal female and extremities were within normal limits. Neurologically, the child had 2+ reflexes bilaterally and was without nystagmus or seizure-type activity.

LABORATORY DATA: Serum pH while child was breathing 60% O_2 was 7.26. Blood gases on 30% oxygen revealed a pH of 7.46, PCO_2 of 26, PO_2 of 80 and calculated Bicarb of 17.4. Urinalysis was clear. Electrolytes revealed a sodium of 136 meq/1, potassium of 5.5 meq/1 and fasting sugar of 90 mgms%. White blood cell count was 18.9/cu.mm., hemoglobin of 8.9 gms% with hematocrit of 27.5%. Differential revealed 42% polys, 24 stabs, 29 lymphs, and 5 monos. Subsequent blood gases on room air revealed a pH of 7.41, PCO_2 of 35, PO_2 of 78 and Bicarb of 21. Blood cultures drawn at the Mobile Infirmary grew a Group B streptococcus sensitive to Penicillin and Ampicillin but resistent to Gentamycin.

HOSPITAL COURSE: The child was admitted to the Intensive Care Nursery and placed in an isolette under 70% FIO_2 by hood and monitored respiratory and heart rate. Over the first 12-24 hours, the child had intermittent apneic spells which spontaneously improved when the heart rate became close to 100. Oxygen concentration was gradually reduced until room air was obtained on the second hospital day with good blood gas analysis. The child was initially begun on Ampicillin, 300 mg/kg in four divided doses and Gentamycin, 5 mg/kg divided into two doses. Subsequently, this was changed to penicillin G therapy. Chest x-ray once again revealed a patchy, pneumonic infiltrate.

The child is currently breathing well on its own and is in a crib, eating well and gaining weight. Because of the large bruise under the right jaw and the old fractured rib, the possibility of abuse was considered in the child and abuse forms were filled out. Social Security is currently evaluating the situation.

Discussion:

Dr. Raymond Peterson (Professor of Pediatrics): I thought that the purpose of the discussion of this patient today would be to concentrate on Group B streptococcal infections. The infant that you just heard presented revealed a few of the exceptions that always exist in any patient such as the fractured bone. However, with the exception of a few tlittle things, it is actually a classic example of the encounter of an infant with a Group B streptococcus and in this case, an encounter that led to a serious infection.

There are several aspects of a Group B streptococcal infection that are worthy of exploration. I will divide them into two categories: the clinical considerations and the fundamental ones. There is some fundamental knowledge that exists but it is not always possible to link it with the clinical pictures. We will concentrate on the clinical aspects initially and then, interest and time permitting, we will look into the fundamental ones.

Group B Hemolytic Streptococcal Infection In The Newborn

What is beginning to fascinate more and more people now, as one looks at the interface of infectious agents and children, is the realization that there is an immense amount to be learned about this peculiar relationship and that the encounter is not strictly an adversary one. It is becoming apparent that it is not such a simple thing as there are enemies that are bugs and we defend ourselves against the bug. There is a much, much more subtle interaction of infectious agents and the human organism. The fact is that we all live with Group B strep infection plus some other infectious agents, and we don't seem to have any bad results as a consequence of living with them. I think this reinforces the idea that most of us live in a pretty happy equilibrium with most micro-organisms and it's only the exceptional situations that the encounter reaches the point of an actual infection.

There are a number of things about Group B streptococcal infections that prompt more interest than I suppose most infections that one encounters. Actually, the Group B streptococcal infections were really not thought of as common infections of mankind until a few years ago. My first encounter with someone discussing Group B streptococcus was Dr. Nattie Schwartz in Sweden. She worked for years showing that the Group B streptococcus produced arthritis in rabbits. For those of us struggling in the rheumatology field at that time, this excited us because we thought that someone had finally found the causative organism. Actually, there is no question about it, Group B streptococcus or some types of Group B streptococcus can produce arthritis in a rabbit. However, it doesn't seem to do so in man, at least there is no evidence that it does.

But at any rate, as far as newborns are concerned, it is quite clear that when I was in a residency and to other house officers of that era, we did not see Group B streptococcal infections as the cause of sepsis in newborns. We saw a lot of other organisms and I sincerely doubt that we were missing Group B streptococcal infections. Most of these organisms are very hemolytic and they would have been picked up in the laboratory and not have been mistyped. One can argue that folks are just more interested in this group of organisms now and if one is interested in something, one just starts looking for it and will find it. That is possible, but probably something has happened in the epidemiology of the situation so we really, in fact, are encountering more of these types of infections now than we did 10 or 15 years ago.

Nowadays, about one third of neonatal meningitis is a consequence of Group B streptococcus. Other types of neonatal sepsis, other than meningitis, shows a high percentage are due to Group B streptococcus, about a third are due to E. coli and a third due to a variety of other things. So, Group B streptococcus seems to have come into recent prominence. I think something has shifted in the equilibrium of man's relationship with micro-organisms, but as I said it is always possible that we are just finding what we were looking for.

The organism itself is obviously a streptococcus and I don't know the details of the history of this, but as far as I know it was about forty years ago when Rebecca Lansfield first began cutting into this whole bunch of streptococci and began identifying the various groups of the Beta hemolytic streptococci. They were initially characterized on the basis of their carbohydrate moieties present in the cell wall. We know that there are other characteristics of these organisms that enable one to separate them, but the carbohydrate antigens present in the cell wall are different so as to enable one to distinguish these different groups of the streptococcus. Along the same lines, but a little bit out of order in my response, is to the protein in the cell wall. However, the immune response that seems to protect against these Group B is to the carbohydrate.

Dr. Edwin Hughes (Professor of Pediatrics): Could you just inject a Group B streptococcus and produce antibody?

Dr. Peterson: Well, if you inject a Group A, you will develop an immune response both to the protein and carbohydrate.

As I said, most of these Group B streptococci are Beta hemolytic so the laboratory will report a Beta hemolytic strep. The figures that I have seen show that about 5 to 6% of Group B streptococci are non-hemolytic. So one will miss those if one just looks for beta hemolysis. And then one additional thing, the sensitivity of Group B streptococci to Bacitracin, which I always thought was just pathognonomic of a Group A streptococcus, doesn't really hold up.

About five per cent or so of the Group B are also sensitive to Bacitracin and also will be inhibited. Anyway, Group B streptococcus is a gram positive coccus, generally Beta hemolytic, which is occasionally inhibited by Bacitracin. So if one has a beta hemolytic streptococcus that is inhibited by Bacitracin, it is probably in Group A, but not always, as there are a few exceptions.

Dr. Vernon Scholes (Professor and Chairman, Department of Microbiology): I think it is important for us to realize that when one is doing Bacitracin sensitivites, there are two concentrations of Bacitracin discs available. One is specifically made for grouping streptococci and has a lot less Bacitracin in it than discs used for ordinary routine sensitivity. If one uses the routine sensitivity disc for this other purpose, one is going to get in trouble. One wants to be sure one has the proper Bacitracin sensitivity disc.

Dr. Peterson: And then just because I will talk about it a minute later, one can subtype Group B streptococci on the basis of carbohydrate into several different categories. The only ones that I know about are 1 A, B and C, but there may be more. I am sure the more you learn about organisms, the more one is able to classify them even further. There was evidence, that apparently still stands in the literature, that different types of clinical infection occurred as a consequence of different groups. Specifically that type B 3 led to the later infection and meningitis and 1 A was the most common cause of the acute and almost uniformly fatal sepsis that occurs very early in life. Apparently, that distinction is not holding up. It would be nice if it would because there is some immunological data that could explain it all, but apparently investigators who are looking at it now the most are seeing just as many Type B 3 in the immediate newborn septic period as they do later.

The Group B streptococci live in man and a lot of other animals, too. I mentioned Schwartz's work with rabbits, but I think the Group B streptococcus was initially indicted as the cause of bovine mastitis and that is where it was best known. If one cultures man to find out where it resides, it is located mainly in the respiratory tract and in the genito-urinary tract. These are common sites of colonization. The asymptomatic, (and as far as I know they are all asymptomatic), vaginal carrier rates run 5 to 30% depending on whose figures you look at. Men carry the Group B streptococci in the urethra as well and it is possible that some people ping-pong it around that way, but apparently the bug is ubiquitous enough so that we eon:'t have to get it through that route. There has been a question as to whether it really is a venereal disease; that is, whether it is transmitted in a venereal fashion. The answer is probably no.

If one looks at the colonization of newborns in the nursery, one will find that this varies from the time of the year, what nursery, etc. One will find it either in the nasopharynx or the umbilical cord in about two to about 40% of infants in the nursery. The transmission to the infant is generally considered to be during passage through the birth canal where the child certainly encounters the organism.

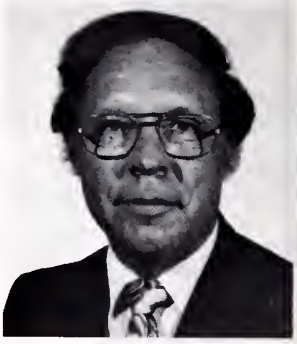
However, there are a couple of studies now that pretty strongly support the position that the baby can also acquire the organism as a consequence of contact through sources other than the birth canal. There have been a number of instances that have occurred where the mother has not had Group B streptococci. There has also been some little endemics where there has been a higher incidence than one would expect in a certain nursery. In these instances, personnel have been the carriers. There has been some effort to break up these cycles by having people wash their hands more and there has been some beneficial effect from this.

I believe that the epidemiology is going to have to be laid out more for us to fully understand transmission. For the moment, I just say as far as it comes to the hospital containment of this organism, one just wants to reinforce the standard nursery techniques which are good and which can really keep down the incidence of staphylococcus, etc. This is basically good handwashing between patients.

University of South Alabama
College of Medicine

Pediatric Grand Round

Dr. Raymond Peterson
Professor of Pediatrics



The patient presented here manifested the spectrum of symptoms that are commonly encountered in such an illness. These cases can sneak up on any practicing physician. One has to have a high degree of sensitivity or a high degree of suspicion that sick little babies are septic and I don't care if they have a fever or a high white count or a low white count or if they are red, white and blue or any other thing. If the child is sick and not doing well, then always think about sepsis.

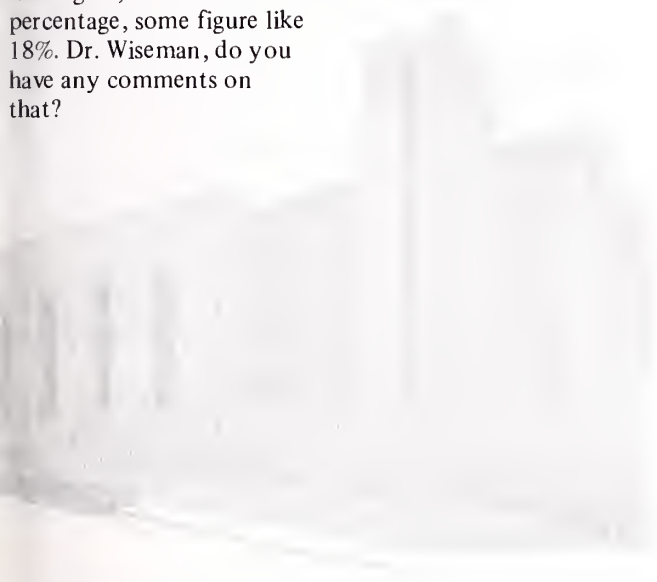
The spectrum of this Group B streptococcus story seems to be a tremendously wide one. One can find children who have bacteremia, children who have been cultured for good or bad reasons, who have been found to have a Group B streptococci in their blood but have absolutely no symptoms. The ones who are reported in the literature in which this has happened have been treated and that is what I would also do. If you ask me if I have to and I would reply that I don't know, but I would. So I don't know if they would have gone to a septic picture. And then one can find a large number of children in the middle of the spectrum who have a fairly difficult sepsis, much like this infant presented with meningitis or both. Then one will find some children at the other end of the curve that have a large variety of unusual manifestations. One can see children with a septic joint, an ethmoiditis or with a local area of cellulitis. I have seen a child with an orbital cellulitis in the

first three or four days of life that have been the consequence of a Group B streptococcus. Most of them, as I stated here, are in the middle if one believes in the normal curve.

Dr. Hughes: What was wrong with this child's neck?

Dr. Hollis Wiseman (Professor of Pediatrics): They thought that it was a problem caused by the parents attempting resuscitation.

Dr. Peterson: The mortality, like most sepsis in children, is very high in the untreated child. It will run 100% in those children who present very early in life with sepsis. With meningitis, there is a much lower percentage, some figure like 18%. Dr. Wiseman, do you have any comments on that?



Dr. Wiseman: It varies on the presentation. If it is seen at early onset which is basically septicemia and pneumonia, the mortality figures run as high as 18%. If one sees the late onset, the mortality figure is more like 15 to 20% in those who have meningitis. We have had them present in shock as early as four hours of age.

Dr. Peterson: Now the thing that particularly fascinates me gets us into more the fundamental side. This is one issue which I brought up earlier and said that I could not answer, but I am going to mention it again. That is the epidemiology, the apparent appearance of this organism, as the cause of disease in present days and we didn't think we saw it 5, 10, 15 years ago. The only other comment I have about that is when Lansfield was first characterizing the streptococci forty years ago, there were some studies that showed essentially the same incidence of vaginal colonization then as now. So if something has changed, it isn't the presence of the organism in the birth canal.

So let's assume for the moment that the organism was there 40 years ago and is still there but now children are having problems with it. One can look in a number of places for changes, but the obvious one I suppose is the defense mechanism. How do we normally defend ourselves against this organism or how do we normally ideal with it when we encounter it. Well, I can give you some superficial answers but if I get down a little deep though, the answer is that I don't know. I will just tell you some general things that may or may not be useful to anybody. Most of these gram positive organisms, and this one is included, are finally killed as a result of phagocytosis. They are taken into a phagocytic cell into a large vesicle. The lysosomal vesicles come around and dump their enzymes into the big vesicle and kill the organism. This process of phagocytosis is further enhanced by the opsonins.

The opsonins that I know about are antibodies and complement. Most gram positive organisms are handled in this way. By contrast, the gram negative organisms are very often handled in this way. By contrast, the gram negative organisms are very often handled in a different way. I don't know, Dr. Scholes, maybe you will explain to us this gram stain, that stain that seems to have such an important ability to distinguish the gram negative organism. They can be handled in the same manner as gram positive organisms but gram negative organisms are such that they can have holes punched in them as a consequence of antibody to the capsule, activating complement and then the complement enzymes eventually destroying the bacteria. But that sequence does not appear to occur in the streptococcus.

What is the chemistry of the gram stain?

Dr. Scholes: It is the construction of the cell wall in the cell membrane. On a gram negative cell you have a quite different structure. You have a double layered cell wall as well as the cell membrane. These stain differently when dyed and it is this structure which causes the difference in staining when dyed. A negative cell wall is very much different than a gram positive cell wall. The outer cell wall of a gram negative cell does have a two layer structure which causes the cell wall to become less rigid and more susceptible to antibodies.

Dr. Peterson: Thank you. The point is that this is the process of ultimate killing by any phagocytic cell. That can be a polymorphonuclear cell and probably it can also be a mononuclear cell, a macrophage. This is the process that eventually kills off the organisms and I will assume that there is something in this mechanism that is not functioning properly in newborns.

Dr. Wladimir Wertelecki (Professor and Chairman, Department of Medical Genetics): I think somebody has shown that there is a good relationship with material antibodies transferred to the babies. Do you have any information on this?

Dr. Peterson: When I initially stated that there was a postulate by the group in Whitcombe, Wyoming, it was concerning this as the cause of the septic period early. That was kind of fun because the 1A antibody seemed to not cross the placenta. They are almost certainly Gamma M and, thus, don't go across the placenta. This would explain the reason why these infants are sitting ducks simply because they lack antibodies. Type 3 antibodies do cross the placenta and is probably Gamma G. But this story is just not holding up. I suppose that all I know for sure is that nobody knows and it is not easily explainable in terms of whether or not they have antibodies. But obviously that is one of the places to look. Physicians that I know are looking in those areas and they are trying to dissect out this process in the newborn. Of course, the fact is only certain if the maternal antibodies can cross, but if the mother is not immune, the baby cannot get any immunity.

Dr. Scholes: There is something else that I wonder about. We talk about opsonins, antibody and complement. Is this the same thing as the opsonic index that we used to perform a long time ago in which there is a cellular recognition factor? This is an important part of this because without the presence of the cellular recognition factor you do not have phagocytosis.

Dr. Peterson: Vernon is right. The term opsonin means to enhance phagocytosis. There is something in the serum that enhances phagocytosis, and I put down antibody and complement and Vernon asked are those the only two things? I would like to say yes, but the answer is no. There is some work being done now in this Group B streptococcus area that suggests that there is a heat labile opsonin which the author says is not complement. The evidence that this is not complement does not overwhelm me, but it is written down. He says there is a non-complement heat labile opsonin that is present in the serum of the children who have the infection and not present in the serum of the kids who don't have it.

Dr. Wiseman: Are you saying that in normal newborns that this thing is defective or that opsonization in general is defective?

Dr. Peterson: I don't know that it is defective. The studies that have been done show that cord phagocytic cells have the same capacity to ingest and kill these organisms as does the maternal cells. There has been some hint that if the maternal cells aren't capable of engulfing X number of organisms per phagocyte, then the baby's cells aren't so good at doing it either.

Dr. Wiseman: This suggests to me that we may draw a corollary here with another neonatal disease, necrotizing enterocolitis. This condition can be initiated by a number of non-specific things that happen to sick babies. In other words, something happens to sick babies which interfaces with normal processes that protect adults. We have seen necrotizing enterocolitis on occasion as a secondary phenomenon, particularly in small babies, and this may happen with Group B streptococcal disease.

Dr. Peterson: That is highly possible. Under a number of circumstances, one can demonstrate that some children's white cells are not able to respond to chemotaxis. For instance, one can place polymorphonuclear white cells in chambers with polymorphonuclear or phagocytic cells on one side of a membrane and bacteria on the other side. One can demonstrate that under normal circumstances these white cells will start crawling into this membrane because they will be attracted by these chemotactic factors. One can also find that under a number of circumstances, that infant cells will not respond to that same signal. The same failure of phagocytosis can be seen using the dye NBT. One can find some certain children's cells where they will not reduce the due, but this is probably an indication that they did not ingest.

Dr. Wiseman: In contrast to normal persons where NBT ingestion goes up with a growth of bacteria, in sick babies the ingestion is reduced.

Dr. Peterson: There are 10 or more steps that are essential for this entire system of phagocytosis to work right. I will leave it now by just saying there is a lot of work that has to be done in this area to understand this thoroughly, but the general things that I have shown are what is known and I am pretty sure are true. Antibody, complement, opsonins to enhance this process of phagocytosis which is where killing occurs. As far as we know, once the organisms are engulfed they are killed as well by the white cells from these children as anyone else. But the question, do they have difficulty getting into the phagocytic cells, is also very possible and may well turn out to be the case. I am sure that we are not going to find step one or step 10 or step three is grossly deficient in most cases, but we will find that many steps are compromised or marginal and when all are added up, then one has problems. At any rate, the question as to why the child is susceptible is really an open one. This baby was a premature baby, I see. I did not try to categorize them but as far as I know there has been as much Group B streptococcal infection in full term babies and just as harmless as well.

The treatment is penicillin. Group B streptococcus is not as sensitive to penicillin as are Group A streptococci, but they are just about as sensitive. So one can treat children very effectively with penicillin.

Dr. Scholes: I wanted to know clinically, do you ever find any of these that produce penicillinase?

Dr. Peterson: No.

Dr. Scholes: I didn't think they did. I thought they were all sensitive to penicillin.

Dr. Peterson: The treatment with penicillin is effective. The question of prophylacxis is one that has apparently been a controversial one. I have been so far from this field that I did not know that it was so controversial, but because of the high incidence, some physicians have been advocating that all babies who are carriers be treated. This could mean that one could be treating 25 to 30% of the children in the nursery with penicillin. There has been one control study which came to the conclusion that giving penicillin does not significantly alter the incidence of colonization. In the control study, I am told that the penicillin dosage used only got the levels up to about the minimal inhibitory concentrations. So they may not have given enough, granted, but the efforts to treat children who have colonized prophylactically with penicillin have not been successful in that they have not eliminated the colonization.

Dr. Wiseman: Even those children who are vigorously treated for meningitis continue to be colonized long after the 10 or 14 day treatment.

Dr. Peterson: I guess that is why I keep putting this fundamental thing down because it just reminds us that our mission in life is not to go and stamp out colonization. This has been attempting with Group A streptococci. One can run around like crazy trying to stamp out Group A A streptococci and one is not going to stamp it out. We can try to understand the situations where the organism and its encounter with man could lead to disease and that is worthwhile. To try and stamp out the organism, we will have to stamp out the victim as well. ■

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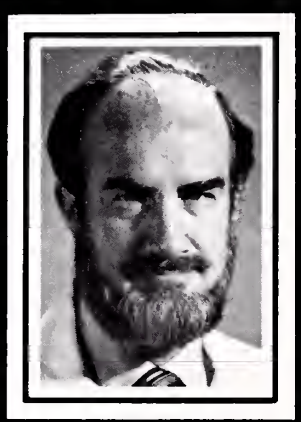
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ASSOCIATION FORUM

Efforts underway to improve rural health care in Alabama



JOHN M. PACKARD, M.D.*

IN the November, 1975, issue of the *Journal,* Dr. Sidney Williams[1] levels some serious charges at the School of Medicine at UAB and at the Alabama Regional Medical Program regarding their actions to improve quality health care for Alabama, especially for the residents of rural areas. Having been privileged to serve as Associate Dean for Community Affairs at the Medical School and as Director of the ARMP from 1969-1973, I share Dr. Williams' concerns about the need for improved rural health and should like the opportunity to defend our record.

How **does** one improve medical care for rural areas? More doctors? The School of Medicine has increased its entering class from 80 to 165 in the past 6 years; the College of Medicine at the University of South Alabama in Mobile will graduate its first 24 MD's in 1977, and has 64 in its entering class; the University of Alabama School of Primary Medical Care at Huntsville and the College of Community Health Sciences at Tuscaloosa are gearing up to graduate 20 MD's each in the near future: three times as many new physicians as were graduated only four years ago. As a stop-gap measure, ARMP and the medical school have assisted the National Health Service Corps in providing a few physicians for towns in special need.

More family physicians? All four medical school campuses have departments of Family Practice and 36 residents are enrolled in the Family Practice Residency Programs at Huntsville and Tuscaloosa, with at least five additional residency programs in the planning stages in various cities around the state.

More exposure to rural areas during medical training? Tuscaloosa and Huntsville each have programs which assign students and residents for periods of time to family practitioners, many of whom practice in rural areas. The Tuskegee Area Health Education Center, jointly funded by ARMP and the VA, provides electives for medical students in the Black Belt area.

Reducing the sense of isolation felt by many rural practitioners? MIST, originally funded by ARMP, has received well over 100,000 telephone calls during its 6½ years of existence, providing a direct link from practitioner to the faculty at the Medical Center. The Dial Access tape messages on a wide variety of material topics are available toll-free to physicians and nurses. Continuing education programs approved for CME credits by MASA (with initial help from ARMP) are being provided at an increasing number of urban hospitals outside the Birmingham area. The Multi Media Learning Skills Library provides audio visual material state-wide. ARMP has helped fund the Alabama Academy of Family Practice's Program for teaching psychiatry to nonpsychiatrists in many regions of the state including the rural areas.

Perhaps the answer to rural health needs is not just more doctors, even family practitioners, because there is no assurance that they will settle in the smaller towns while the larger cities are still short of physicians. Perhaps more nurses and allied health workers with special skills would make a difference, especially if recruited from rural areas and trained as close to home as possible. In the past seven years, the state has started 22 new nursing programs, many with consultation from ARMP and three with early financial support. Several, in addition to the Ira Pruitt School of Nursing of which Dr. Williams is justly proud, are in smaller cities and towns such as Jacksonville and Brewton. Advanced taining and refresher courses in CCU techniques have also been provided with ARMP support for over 2,000 nurses, many of whom function in the smaller hospitals of the state. Nurse Practitioners Programs for OB/GYN, pediatrics and family practice are underway at the Medical Center.

The Regional Technical Institute, which has received support from many sources including ARMP, provides a linkage with the 18 junior colleges in the state to give just the clinical portion for a wide variety of allied health training programs in Birmingham, with much of the training and graduation taking place at the local junior college close to their homes. Graduates of these programs will hopefully ease the shortage in rural areas.

It is probable, however, that more physicians, nurses, dentists and allied health manpower alone cannot solve the problems of rural health. There needs to be a multi-county approach involving local governmental officials and concerned laymen as well as health professionals. Area-wide Comprehensive Health Planning Councils (soon to be HSA's) and district health departments have been initiated or supported by ARMP. The regional approach to emergency medical services, including the training of well over

(CONTINUED ON PAGE 41)

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(CONTINUED FROM PAGE 38)

EFFORTS UNDERWAY TO IMPROVE RURAL HEALTH CARE IN ALABAMA

1,600 Emergency Medical Technicians and upgrading of standards is the result of many concerned citizens and agencies and has been expedited by ARMP funds, allocated in large part to the State Health Department. ARMP and the Medical Center in Birmingham have been active in development of the Regional Cancer Therapy Program, of regional High Risk Nurseries, and of a regional arthritis program. A regional approach for the treatment of high risk pregnancies is being planned in areas of the state.

In the same vein, ARMP has supported consortia of hospitals for sharing of in-service and on-the-job training programs as well as bulk purchasing of supplies, equipment and services.

In the final analysis, improved rural health depends upon an informed public, aware of its responsibility for individual and community health measures and knowledgeable about how to use the medical services available. Project HELP, a joint venture by the Auburn Extension Service, the State Department of Health and UAB is attempting to fill this gap. These three agencies and many others have also received assistance from ARMP in numerous cancer and hypertension screening programs.

ARMP policies are established, and funds for all these programs are approved, by a state-wide advisory council comprised of practicing physicians and other health professionals, health educators, governmental officials (including the mayor of Livingston) and concerned citizens. Many worthwhile projects, such as the one mentioned by Dr. Williams, could not be implemented by ARMP because of failure to meet national guidelines or insufficient funds, but a number of these have been funded locally or by other programs. It is true that many of the programs I have referred to are managed by institutions located in Birmingham or Montgomery, but all have direct or indirect effects in the rural areas.

In summary, measures being taken to improve the quality of rural health care in Alabama include increasing the number of health professionals being trained, decentralizing education to the smaller cities, establishing family practice residency programs, improving communication (MIST), increasing the availability of continuing education programs in smaller cities, supporting the regionalization of health planning and health care delivery and increasing public education in health matters. Numerous institutions, agencies and citizens share the credit for this multi-pronged approach to a most difficult problem. The Medical Center and the Alabama Regional Medical Program have played key roles in initiating and maintaining many of these efforts. ■

*Dr. Packard is serving as Associate Dean, College of Community Health Sciences at the University of Alabama in Tuscaloosa. The opinions expressed here reflect those of the author. They do not necessarily reflect those of the editorial review board of this JOURNAL.

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The Individual Doctor
He need not walk alone

Address of the President, Max H. Parrott, M.D., delivered at the 29th Clinical Convention of the American Medical Association, November 30 - December 5, 1975, Honolulu, Hawaii.

"I suppose I could address myself here to the great, eventful issues in health care, but I prefer to direct attention to the most intimate problem which you and I face. It is a problem that is interwoven with those great issues though distinct in itself. And today it is as urgent as they are. This problem is the growing attacks on the physician as an individual and on the manner and spirit in which he practices. I refer especially to public verbal attacks which have been gaining in frequency and ferocity. No longer can we find dubious comfort in seeing organized medicine serve as an impersonal fall guy for such abuse while we personally are spared.

"I will not ascribe motives for the attacks. Even prolonged official inquiries into controversial public activities—such as those of the CIA and FBI or in the way political campaigns have been run at all levels—have been hard put in finding any distinct and precise motives. But let me say this: If forces or conspiracies choose to "divide and conquer" medicine, they could certainly view a barrage against the individual doctor as the most effective way to do so. And if any forces choose to march our profession toward ever more unreasonable controls, they could regard that barrage as the most cunning way to do so. For the apparent intent of the assaults is not to admonish us but to discredit us in the eyes and ears of our patients, whose trust in us has always been and must always be our chief mainstay.

"The people's image of organized medicine is too abstract to be exploited beyond a certain point. But their image of the individual MD is clear and therefore sensitive. I, for one, am not particularly afraid of the slurs. I believe that our profession retains and justifies enough public confidence to withstand them. Recent public-opinion polls indicate that confidence. Perhaps most important of all, we individually enjoy the trust of our respective patients, assuming we work at it constantly.

"But while I do not fear the slurs, I do fear that we may become so defensive of what we are, and of how we practice, that we will begin to demonstrate a paranoia. And if we over-react, our actions could be far more damaging to the public's respect for us and to our self-respect than the attacks themselves. There must be validity in what we say and do in the face of the attacks. Above all, a devotion to that validity must be anchored firmly in our hearts.

"To start with, we must see the assaults in the context of our times and the present nature of medicine. No matter how largely erroneous or exaggerated the accusations are, we must try to understand any underlying truth or plausibility that they might have. Only in that way can we deal with them wisely and persuasively.

"Generally speaking, the specific accusations are extravaganzas on two basic charges: that we physicians are indifferent to the patient and that we are motivated by self-interest. So first, what plausibly could underlie the notion that we are indifferent? One answer is that we modern doctors are caught in a crossfire between technical progress as a blessing and as a curse. Rapidly expanded technology is a principal means whereby we have amplified our medical insight, skill, and effectiveness. Yet, by its very nature, it can depersonalize us and our relations with the patient even while serving or striving to save him. And its cost can further alienate the patient. Depersonalized and costly procedures can easily be taken for an indifferent attitude.

"Also, the technology has made us more specialized—more concerned with parts and particles of the body—whereas, in human terms, most patients would want us to have the attitude of generalists—to see him as a whole personal entity. In medicine as in any other field, technology calls for organization which can further depersonalize. As a study issued by the Brookings Institute has noted, and I quote: "More science and more knowledge mean increasing specialization, which in turn brings a subdivision of labor and interdependence of personnel. Complex mechanical equipment means dependence on para-medical personnel as well as institutional arrangements for the feasible economic use of such equipment. Today it is no longer possible for a single physician to deliver a total medical product. Medical practice is inescapably an organizational process."

"That description implies that our profession hardly deserves to be called a "cottage industry." Yet, the farther behind we leave the cottage and the bigger the framework in which we function, the smaller the patient can feel as a human being. In addition, the patient probably has mixed feelings about the technology itself. It can arouse fear and distrust in him as well as hope and confidence. And if his doctor seems indifferent, that potential fear and that potential distrust can be all the greater.

"Negative feelings toward us can be conditioned not only by the technological order of our times but by the spiritual chaos in society. Spiritual cynicism, fed by the largely shapeless course of daily events, pervades our age. It has turned many people into what in medieval days were called Nominalists. The Nominalists were a school of philosophy that believed the universal verities, such as truth and justice and honor, exist merely as words with no inherent tie to

things as they are. In contemporary America, if cynic H. L. Mencken is to be believed, the word "honor" has only "comic significance" except when applied to a woman's "structural integrity." That's a kind of an inside gynecologic reference.

"Yet it should be said that the repute of us physicians is based on the philosophy of the opposing medieval school: the Realists. We agree with Plato, Aristotle, and the Realists that universals are indeed intrinsic to reality. In more modern times, the French novelist Balzac saw medicine in the light of universals when he wrote: "The physician strives for the good as the artist strives for the beautiful, each pushed on by that admirable feeling we call virtue."

"Unless present-day Americans feel that we are guided by such verities—verities that, for us, date back to Hippocrates—then they will judge us strictly by particulars, including real and fancied instances of so-called malpractice. They will judge us strictly by outcomes that may be thwarted by the present state of the art of medicine, rather than by intentions that redound to the state of our souls.

"If we are to enable patients to assess the outcomes realistically and in the light of our intentions, perhaps we should demonstrate a greater humility toward the state of our art. Above all, we should demonstrate greater humility toward the patient through doctor-patient rapport. Ample evidence exists that a good relationship with our patients is the best single defense against professional-liability claims. For while the evils of the tort system have helped the claims spread like alfalfa grass and must be weeded out, the patient's feelings are usually the seed of that growth, fertilized by the aggressiveness of the plaintiff's attorneys, the passiveness of the defense bar, and the emotionalism of some juries.

"Just as professional-liability actions exemplify the general assertion that we are indifferent, so-called unnecessary surgery illustrates the second of the two general charges against us: that we are motivated by self-interest. Aside from the fact that some unprincipled persons can be found in any occupation, what grounds exist for the notions of willful self-interest and of widespread unnecessary surgery? Those notions, for the most part, are non sequiturs—false conclusions from obvious facts.

"It is a fact that the costs of care have risen. This is personalized, and oversimplified, into being the doctor's fault—often to the exclusion of inanimate reasons, such as inflation, the improvement and expansion of medical services, and the impact of federal funding. It is a fact that in some places the supply of surgeons, particularly general surgeons, exceeds the basic needs of the population. So it is assumed, without any hard evidence, that there must be the same surplus of surgery.

"It is an often-repeated fact that fewer operations, per capita, are performed in Britain. But that fact points at a deficiency in the National Health Service there, rather than at an excess here, if we are to judge by a recent dispatch in *The Baltimore Sun* which said: "More than 500,000 persons are waiting for operations in Britain—some of the non-urgent for up to four years, 37 per cent for more than one year, and 20 per cent for two years." Exaggerations of the extent of unnecessary surgery in America spring partly from misconceptions of what it is.

"One misconception is that "elective" surgery can be virtually a synonym for "unnecessary"—most notably in the case of hysterectomies. Another false idea is that surgery is probably needless unless it is recommended by each doctor who considers the matter. And there is the kindred idea that any doctor's decision on surgery can be as reliable as he chooses. You and I know, however, that the most conscientious choice is subject to present and future variables in the case itself.

"Even so, how much unjustified surgery really takes place? A uniquely calculative survey has just been made by Ralph S. Emerson, M.D., President of the New York State society, and a member of this House. He used criteria developed by that society, the American College of Surgeons, and specialty societies, plus tissue reports. Out of 833 assorted operative procedures in 12 varied Brooklyn and Long Island hospitals—both voluntary and proprietary—he found that fewer than 1 per cent were unjustified.

"Let me add that self-interest did not necessarily figure even in that tiny proportion. Yet legislatively, regulatively, and polemically, we are being stereotyped as self-interested.

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THE INDIVIDUAL DOCTOR
He Need Not Walk Alone

Each of us may bitterly regard the stereotype as a personal stigma and the attacks as a personal threat. In consequence, we may feel alienated and sulk alone. Or going to the other extreme, we may join some splinter movement in a bid for instant relief, telling ourselves, like the man in the Louis Simpson poem: "Surely there is a secret which, if I knew it, would change everything."

"Under such circumstances, it is possible for the individual physician to regard himself and the American Medical Association as dichotomous. It is possible for him to consider the AMA remote from his individual problems and needs simply because it is an institution. Yet, it is for the individual and through the individual that this Association exists. To paraphrase Ralph Waldo Emerson, this institution is the lengthened shadow of its membership. Only through this institution can the physician cast his shadow on the wide range of problems he faces in his ability to serve his patients...."

(Dr. Parrott closed his address with a strong appeal to physicians of America to support the AMA, his State Association and County Medical Society saying:)

"Remember: as Delegates, you are AMA officers between conventions as well as during them. And let us always remember that our link with the individual physician, the doctor back home, is the very axis of this federation." ■

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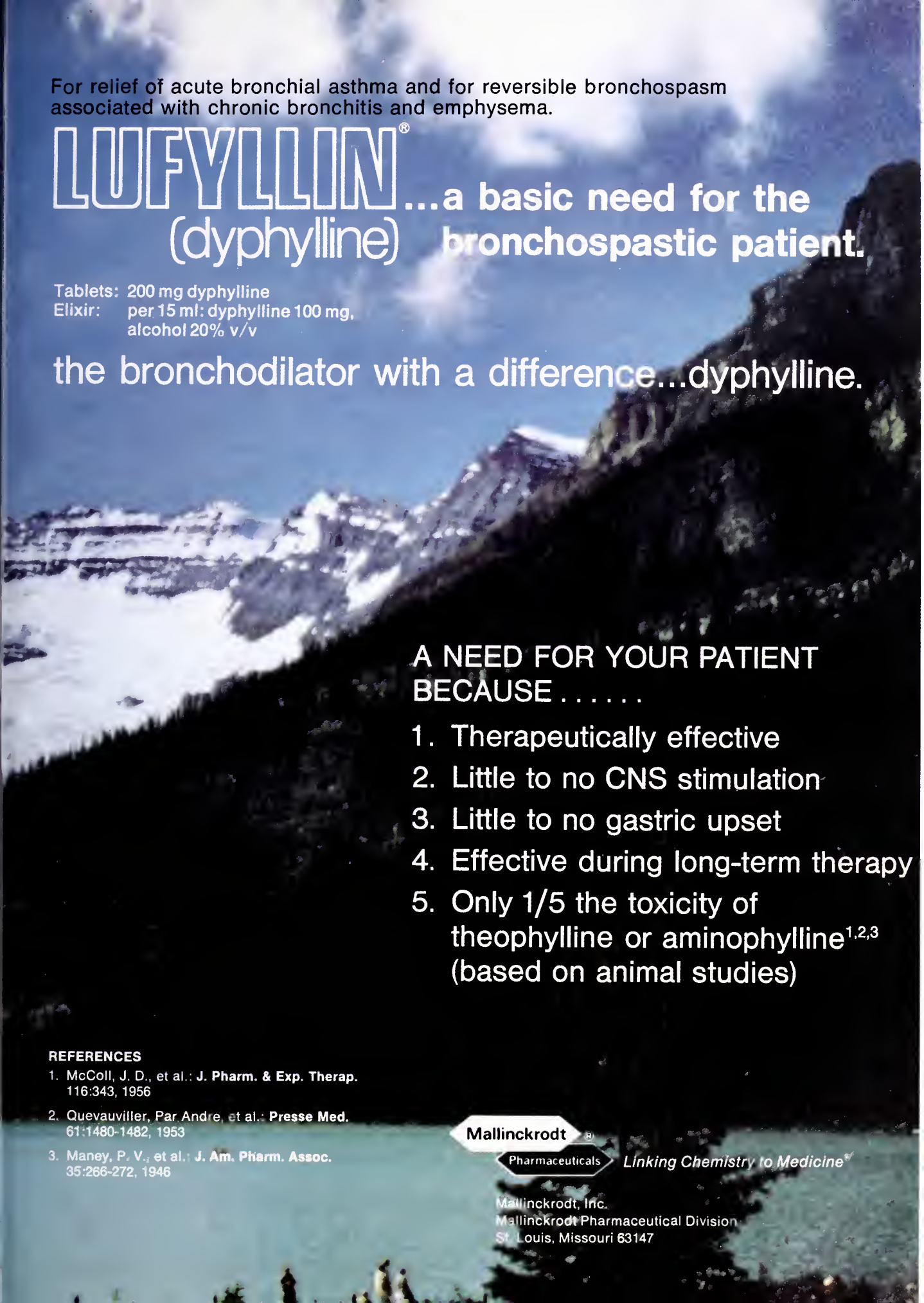
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HUDSON, Clayton Nolen, b 38, mc Ala. 73 recip. NBME 74, Lloyd Noland Hospital, Fairfield, 35064. S.

INGERSOLL, Inge, b 47, mc Univ. Munich 66, Limited Lic. 75, UAB - University Station, Birmingham 35294. Anes.

KANSAL, Prakash Chand, b 28, mc King George Medical College/India 54, recip. Ga. 75, 1808 7th Ave., South, Birmingham 35294. I.

LANZ, Egon, b 41, mc Univ. Germany 66, Limited Lic. 75, UAB - University Station, Birmingham 35294. Anes.

LYRENE, Raymond K., b 45, mc Ala. 70, recip. NBME 71, 1601 6th Ave., South, Birmingham 35233.

MARTIN, Robert Gary, b 41, mc Univ. Louisville 67, recip. Ky. 68, 801 Princeton Ave., SW, Birmingham 35205. C.

McDANIEL, Huey Green, b 37, mc Ala. 63, sb 64, 700 South 19th Street, Birmingham 35205.

McDOWELL, Paul Douglas, b 46, mc Ala. 73, recip. NBME 74, University Hosp. UAB Station, Birmingham 35294. N.

MIHAS, Anastasios A., b 43, mc Univ. Athens in Greece 67, Limited Lic. 74, UAB - University Station, Birmingham 35294. I-C.

MILLER, Neal Martin, b 42, mc Emory 68, recip. Ga. 69, 1515 6th Ave., South, Birmingham 35205. Path.

PEDERSEN, Arthur Norris, b 23, mc Univ. Neb. 47, recip. Neb. 47, 310 Woodward Building, Birmingham 35203. Emer. Med.

PINO, Jorge Arthuro, b 40, mc Universidad del Valle South America 64, recip. Ill. 73, 1808 7th Ave., South Birmingham 35294. I.

POLHILL, Rutherford Brown, Jr., b 41, mc Univ. N.C. 68, recip. N.C. 68, 1601 6th Ave., South, Birmingham 35233.

RAJPUT, Mohamed I., b 42, mc Univ. East Africa 68, Limited Lic. 74, UAB - University Station, Birmingham 35294. Anes.

REYNERTSON, Richard Howard, b 40, mc Univ. Ill. 65, recip. NBME 66, 1808 7th Ave., South, Birmingham 35294. I.

REYNOLDS, David Waldo, b 41, mc Emory 66, recip. Ga. 66, UAB - University Station, Birmingham 35294. Pd.

SCOTT, Charlie William, Jr., b 35, mc Ala. 61, sb 66, UAB - University Station, Birmingham 35294.

SLAUGHTER, Robert Lewis, b 37, mc Ala. 62, sb 63, UAB - University Station, Birmingham, 35294. I.

SPENNEY, Jerry Gorton, b 38, mc Univ. Ill. 63, recip. NBME 64, UAB-University Station, Birmingham 35294. GE.

SUMNERS, James, B 45, mc Univ. Tenn. 69, recip. Tenn. 69, UAB - Univ. Station, Birmingham 35294. Pd.

ULLOA, Alexander, b 27, mc Universidad Nacional Mayor de San Marcos 52, Limited Lic. 74, UAB Medical Center, UAB Station, Birmingham 35294.

VARGAS, Jose Rodolfo, b 43, mc National University of Nicaragua 67, recip. Ill. 73, 1808 7th Ave., South, Birmingham 35294. I.

WANTED: PHYSICIAN IN ADJUDICATIVE MEDICINE

Veterans Administration Regional Office, Montgomery, Alabama. Equal Opportunity Employer. Position in Federal career civil service at grades GS-12, beginning salary $25,200 per annum. Liberal fringe benefits, regular 40-hour week office work. Reply to O. N. Frederick, Personnel Officer, VA Regional Office, 474 S. Court St., Montgomery, AL 36104. Telephone 832-7184.

WARD, Michael Stephen, b 43, mc Ala. 69, recip. NBME 70, UAB - Univ. Station, Birmingham 35294. Pd.
WHITLEY, Richard James, b 45, mc Geo. Washington Univ. 71, recip. NBME 72, Box 313, UAB - University Station, Birmingham 35294. Anes.

MADISON COUNTY

GRIGGS, Thomas McKay, b 41, mc Univ. Va. 68, recip. Va. 68, 205 St. Clair Ave., SW, Huntsville 35801 OALR.

MOBILE COUNTY

SWAIN, Ronnie Everett, b 41, mc Tulane 67, recip. La. 67, 3709 Tudor Lane, S, Mobile 36608. ALR.

transferred

MONROE COUNTY

FLOWERS, Neal S., Box 430, Monroeville 36460. From Mobile County Medical Society.

deceased

MONTGOMERY COUNTY

SMITH, Walton H. Y., Montgomery, 1/25/76

PIKE COUNTY

COLLEY, Jesse H., Troy, 1/15/76

new phone numbers

ARKANS, Howard D., Birmingham 934-4680
AVENT, Charles K., Birmingham 934-2186
BALL, Gene V., Birmingham 934-4703
CANNON, Nassif J., Jr., Birmingham 934-5638
CLEMENTS, Rex S., Jr., Birmingham 934-4852
CONVERSE, George M., III, Birmingham 934-4280
COOPER, Max Dale Birmingham 934-3370
CRIST, William M., Birmingham 933-4000
da SILVA, Jose M. C., Birmingham 934-4696
DAVIS, Paul L., Jr., Birmingham 934-5131
DERRICK, C. Warren, Jr., Birmingham 934-4531
GAMBOA, Elpidio L., Birmingham 934-2809
GANJI, Stalin, Birmingham 934-2400
GRIFFIN, Frank M., Jr., Birmingham 934-5191
GRIGGS, Thomas M., Huntsville 533-3550
HARDIN, Joseph G., Jr., Birmingham 934-2130
HUDSON, C. Nolen, Fairfield 785-2121
INGERSOLL, Inge, Birmingham 934-4696
KANSAL, Prakash C., Birmingham 934-3614
LANZ, Egon, Birmingham 934-4696
LYRENE, Raymond K., Birmingham 934-3574
MARTIN, Robert G., Birmingham 780-4330
McDANIEL, Huey G., Birmingham 933-8101
McDOWELL, Paul D., Birmingham 934-2400
MIHAS, Anastasios A., Birmingham 934-4726
MILLER, Neal M., Birmingham 933-9211
PEDERSEN, Arthur N., Birmingham 428-0171
PINO, Jorge A., Birmingham 934-2472
POLHILL, Rutherford B., Jr., Birmingham 933-4258
RAJPUT, Mohamed I., Birmingham 934-4696
REYNERTSON, Richard H., Birmingham 934-2200
REYNOLDS, David W., Birmingham 934-5136
SCOTT, Charlie W., Jr., Birmingham 934-5677
SLAUGHTER, Robert L., Birmingham 933-8101
SPENNEY, Jerry G., Birmingham 934-4618
SUMNERS, James Birmingham 934-4680
SWAIN, Ronnie E., Mobile 433-8421
ULLOA, Alexander, Birmingham 934-2472
VARGAS, Jose R., Birmingham 934-2093
WARD, Michael S., Birmingham 934-5255
WHITLEY, Richard J., Birmingham 934-5316
RUSSELL, Melvin D., Tallassee 283-3111
GRANT, Silas W., Huntsville 536-5511

address changes

BALDWIN COUNTY

KIMMICH, Haydee, present Fairhope to 177 Louiselle St., Mobile 36607.

BUTLER COUNTY

STABLER, Paul A., present Greenville to P. O. Box 98, Greenville 36037.

CONECUH COUNTY

HILL, Robert E., present Evergreen to Rt. E, Box 120, Hillsboro, Oregon 97123.

DALLAS COUNTY

HOWARD, Jesse J., present Selma to Rt. 2, Box 124-H, Selma 36701.

JACKSON COUNTY

LeQUIRE, Donald L., present Scottsboro to 2556 Yorkmont Dr., Birmingham 35226.

JEFFERSON COUNTY

CARTER, Robert W., present Birmingham to 4128 Sharpsburg Dr., Birmingham 35213.
LOVELL, Durward L., present Birmingham to 1608 Martin Avenue, Birmingham 35208.
SHERLOCK, Eugene C., present Birmingham to 2018 Brookwood Medical Center Dr., Birmingham 35209.
TRUCKS, J. Frank, present Birmingham to 930 South 20th Street, Birmingham 35205.

MOBILE COUNTY

FLOWERS, Neal S., present Mobile to Box 430, Monroeville 36460.
DYAS, Edmund C., IV, present Mobile to 1855 Springhill Ave., Mobile 36607.
KIMMICH, Homer M., present Mobile to 177 Louiselle St., Mobile 36607.
McLEOD, Andin C., Jr., present Mobile to 1855 Springhill Ave., Mobile 36607.
POLEWODA, Woodrow W., present Prichard to 427 Lott Rd., Eightmile 36613.

MONTGOMERY COUNTY

FERLISI, Joseph A., present Prattville to Jackson Clinic, 1722 Pine St., Montgomery 36106.
ROBINSON, Robert W., present Montgomery to 3196 Fernway Dr., Montgomery 36111.

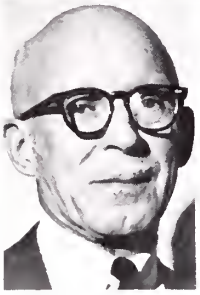
MORGAN COUNTY

CALIX, Arthur A., present Decatur to 1304 Somerville Rd., SE, Decatur 35601.

TALLADEGA COUNTY

BLISS, Richard F., present Talladega to Rt. 2, Box 142, Talladega 35160.

NECROLOGY



W. H. Y. Smith, M.D.
1899-1976

W. H. Y. Smith, M.D. former Director of the Bureau of Preventable Diseases, Alabama Department of Public Health, passed away Sunday, January 25, in Montgomery. He was 77 years of age at the time of his death.

Dr. Smith joined the Alabama Department of Public Health in 1934 and was named director of the venereal disease division of the Bureau of Preventable Diseases. He was promoted to Bureau Chief in 1947. As Bureau Chief, Dr. Smith supervised programs relating to tuberculosis control, heart disease, cancer control but was best known for his work in venereal disease control.

He received MASA's William Henry Sanders Award in 1969 for his public health work and the D. G. Gill Award in 1963 for his work in tuberculosis control. Dr. Smith retired in 1969, after more than 35 years as a public health physician in Alabama.

N. A. Wheeler, Jr., M.D.
1914-1975

Lafayette physician, Dr. Nicholas A. Wheeler, Jr., passed away Saturday, December 27, at his home. Dr. Wheeler was 61 years of age.

He was the team physician for the Auburn University football team for a number of years. In recent years, he had been health officer for Chambers and Tallapoosa Counties.

Until his retirement, Dr. Wheeler operated a family clinic in Lafayette.

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Huntsville / 534-7867

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Physicians' placement service in Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

Family Practice: Age 33; Loyola University Stritch 1968, National Board certified; American Board eligible; seeking multi-specialty group, single specialty group, partnership, solo, emergency room, or other. LW-03102.

General Practice-Radiology, Diagnostic: Age 30; Osmania University 1968; American Board eligible-radiology; seeking multi-specialty group, single specialty group, partnership, institutional, emergency room, solo, or other. Available July 1976. LW - 02611

Family Practice, Obstetrics-Gynecology: Age 44, National Taiwan University, 1958; American Board certified, OBG; seeking institutional, research, public health, academic, partnership, solo, or other. LW - 02906

General Practice-Psychiatry: Age 44; University of Madrid 1959; American Board certified, psychiatry; seeking institutional, single specialty group, partnership, emergency room, solo, or other. LW - 00661

Internal Medicine-Emergency Medicine: Age 29, Medical College of Alabama 1972; National Board certified; American Board eligible; seeking emergency room, industrial, or multi-specialty group. LW - 03382

Internal Medicine: Age 27; University of Miami 1973; National Board certified; American Board eligible; seeking single specialty group, partnership, multi-specialty group, or solo. Available July 1976. LW - 02551

Internal Medicine-Gastroenterology: Age 33; Medical College of Virginia 1969; National Board certified; American Board eligible; seeking multi-specialty group, institutional, single specialty group, or partnership. Available August 1976. LW - 02599

Internal Medicine-Gastroenterology: Age 33; University of Iowa 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership. Available July 1976. LW - 01817

Internal Medicine: Age 32; University of Kentucky 1970; National Board certified; American Board eligible; seeking solo, partnership or research. Available July 1976. LW - 03320

Pediatrics: Age 30; SUNY Upstate New York 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership, solo, or other. Available July 1976. LW - 02336

Orthopedic Surgery: Age 33; University of Pittsburgh 1969; National Board certified; American Board eligible; seeking single specialty group, partnership, solo, multi-specialty group or other. Available June 1976. LW - 02614

Orthopedic Surgery: Age 33; Southwestern Medical School 1060; National Board certified; American Board eligible; seeking research, partnership, single specialty group, multi-specialty group, or solo. Available July 1976. LW - 02812

Surgery: Age 38; Jefferson Medical College 1966; National Board certified; American Board certified; seeking single specialty group, partnership, multi-specialty group. Available August 1976. LW - 02968

Surgery: Age 34; Loyola University Stritch 1968; National Board certified; American Board eligible; seeking partnership, single specialty group, multi-specialty group, solo, or institutional. Available August 1976. LW - 02954

PHYSICIANS WANTED

(Opportunities For Practice)

Family Physician, academic. New University-affiliated residency in city of 60,000 in NE Alabama needs full-time faculty physicians to teach and practice family medicine. We require boards (or eligibility), capacity for hard work, and skills in obstetrics and behavioral medicine. Will accept pediatrician or internist who wants to learn family practice. Start at any level from instructor to co-director. Discover a truly rewarding personal and professional life: interesting practice, cordial atmosphere, humanistic academic style, lovely city and a good income. PW-10

Physicians wanted **(General Internal Medicine, Gastroenterologist, Dermatologist)** Trade area, 400,000 population. Population of town: 45,000, located in Northeast Alabama. Small town advantages with big city conveniences within hour's drive. Ground floor professional opportunity to join a group of internists in the development of programs in General Internal Medicine, medical specialties, and other disciplines appropriate for the establishment of a regional multispecialty health clinic. Financial arrangements negotiable. No investment necessary. Opportunity for partnership in two years. PW-8

A community with combined population of 10,000 located near Mobile, Alabama is seeking a **general practitioner.** Office space available with living quarters. Several churches and schools. PW-9

General Practitioner opportunity in central Alabama town of 4500 population. Within 17 miles north of Montgomery, Alabama. The finest recreational areas in Alabama consisting of 2 large lakes. Newly expanded 69 bed hospital with 8 active staff members. Invitation to visit with expenses paid will be directed to those qualified. PW-4

(CONTINUED ON PAGE 52)

PHYSICIANS' PLACEMENT SERVICE

(CONTINUED FROM PAGE 51)

Group practice opportunity for **General Surgeon.** Seven member clinic seeks a partner to practice general surgery. Community of 10,000+, near Tennessee River, 2 hours from the University Medical Center. New 100 bed J.C.A.H. approved hospital. Free inspection trip, relocation expenses, guaranteed income. PW-5.

General Practitioner's 2 family physicians wanted for general practice in a 64-bed hospital, located between 2 North Alabama towns (in the heart of the Tennessee Valley) with a trade population of 18,000. Office space available. Within 35 miles of large city. Large amount of industrial work in our area. PW-7

Internists, FP's, Ob-Gyn successful practice assured - 300-bed modern hospital, University affiliated, new connecting office building. All urban advantages for your family - Staff retirements leave immediate patient load - Assistance including 6 months free rent. Guaranteed minimum for right individual. PW-6

Internist wanted in central Alabama town with population of 4500 near large city. Newly expanded 69 bed hospital with new 6 bed intensive care unit. 8 member medical staff. Located within 15 minutes of 2 of Alabama's finest lakes. Invitation to visit with expenses paid will be directed to those qualified. PW-2

Pediatrician wanted in central Alabama town with population of 4500 near large city. Newly expanded 69 bed hospital with an active 8 member staff. Invitation to visit with expenses paid will be directed to those qualified. PW-3

WANTED—**General Internist** or Subspecialist with interest in general medicine. University town, population approximately 60,000, to join 4 other internists in a multi-specialty clinic setting; 250-bed expanding general hospital; all-specialty coverage, office expansion in progress; attractive living area. PW-11

GENERAL PRACTITIONER needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36 bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-13

General Surgeon wanted. Tremendous opportunity to associate with General Surgeon in North Ala. Located in the heart of Tennessee Valley Mountain Lake Region. Small town setting, pop. 10,000. Two hospitals (300 beds), ten minutes from Decatur, pop. 45,000. Thirty minutes from Huntsville. Unlimited recreational activities; golf, tennis, sailing. Excellent school system and cultural activities. PW-12 ■

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Dorothy R. Mooney, Associate Director

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ACCREDITED BY THE J. C. A. H.

Digest of actions of the State Board of Censors

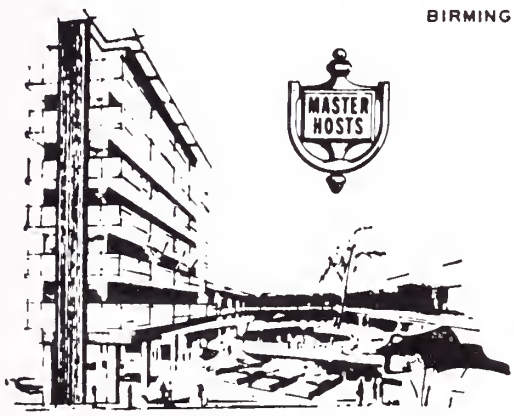
Herewith is presented a Digest of Actions taken at the February 18, 1976 meeting of the State Board of Censors:

- Approved Financial Statement for period ending January 31, 1976 which shows receipts in the amount of $138,298.14 and disbursements in the amount of $50,470.38.
- Concurred in recommendation of the Council on Medical Service that MASA support AMA actions concerning less restrictive Federal regulations governing the performance of voluntary sterilizations paid for by Medicaid, and notes that AMA will form an advisory committee to meet with officials of HEW to redraft regulations governing sterilizations and other Medicaid-funded family planning measures.
- Received as information Digests of Actions for the seven district caucus meetings.
- Approved nomination of Mr. David Marshall for the 1976 Douglas L. Cannon Medical Reporter Award.
- Voted to present a special award at the 1976 Annual Session Awards Dinner to Mr. John Bloomer, Editor of *The Birmingham News,* for his outstanding service in coordinating the Guatamala relief effort.
- Approved Constitutions for Sumter and Cullman County Medical Societies.
- Concurred in Insurance Committee recommendation and ad hoc committee on malpractice whereby a brochure be made available to all Association members outlining benefits of the Continental Disability Program.
- Received for study Insurance Committee recommendation and ad hoc committee on malpractice that the Insurance Committee be made a full council of the Association.
- Approved expenses for A. D. Crowe, M.D. and W. T. Wright, M.D. for their attendance at the Alabama State Bar Association as guest speakers.
- Received as information tentative outline of Program for 1976 Annual Session.
- Approved ALAPAC's request for the first third allotment in the amount of $2,500 for administrative expenses only.
- Authorized Communications Department to make changes in the front cover format of the *Journal* as they see fit.
- Voted to negotiate contract with Collier Cobb and Associates Inc. to set up the basic organization of a doctor-owned insurance company at the point of charter only. ■

Infant Death Rate Reduced

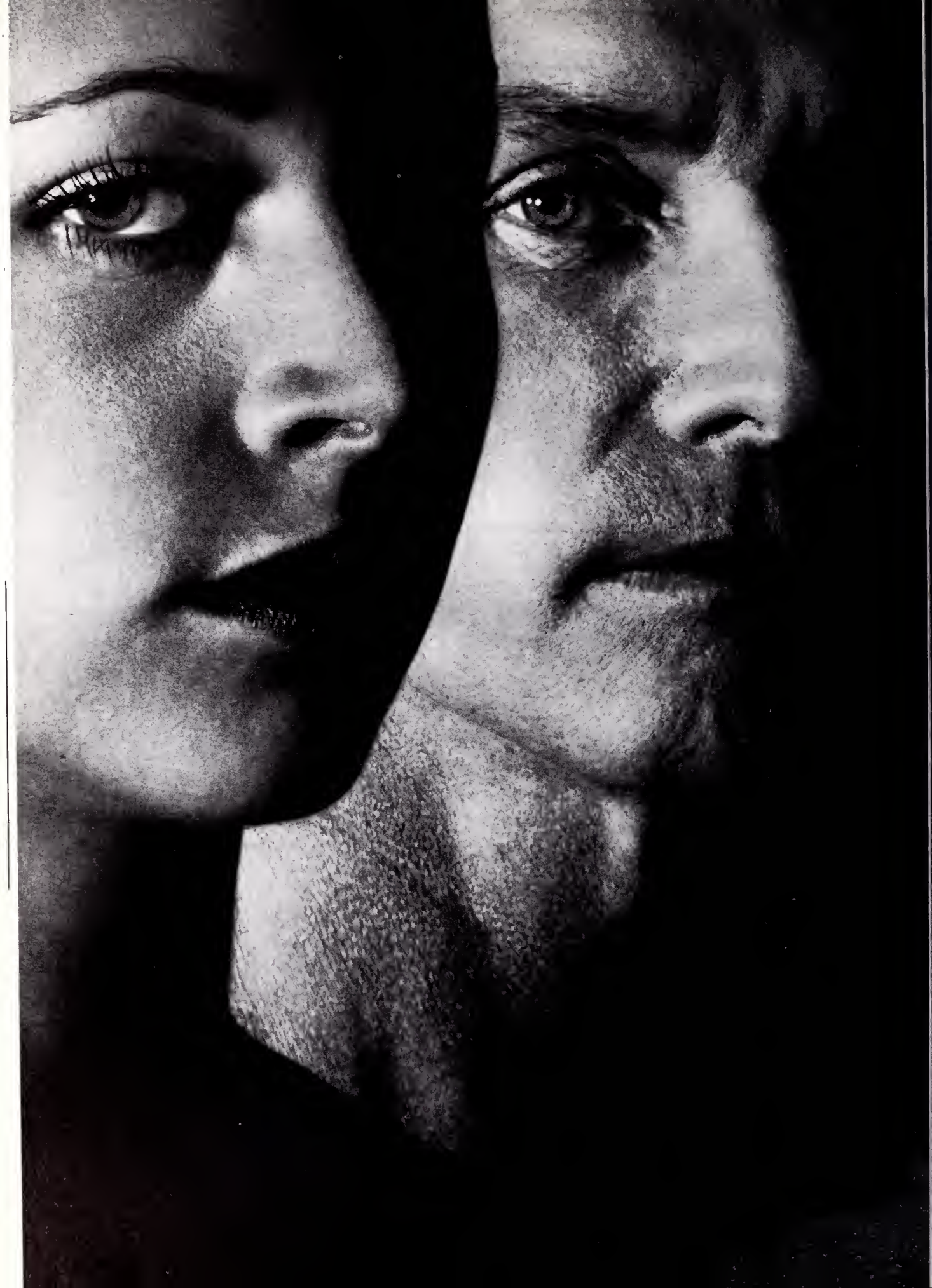
The U. S. infant mortality rate was 16.2 per 1,000 live births during the first eight months of 1975, a 3% decrease from the 16.7 rate during the same period in 1974. In August the infant mortality rate was 14.6, a record low for the month. In August, 1974, the rate was 15.6 per 1,000 live births. ■

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Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

P·M·A
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D. C. 20005

New physicians licensed to practice in Alabama



Marshall, Donald Alan, M.D., University of Alabama School of Medicine, 1973. Reciprocity with National Board of Medical Examiners.



Foster, James Moore, M.D., Vanderbilt Medical School, 1969. Reciprocity with Tennessee. Specialty: Anesthesiology.



Lell, William Alexander, M.D., University of Rochester School of Medicine, 1968. Reciprocity with Massachusetts (FLEX). Specialty: Anesthesiology.



Mazey, Richard Michael, M.D., University of Kentucky College of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



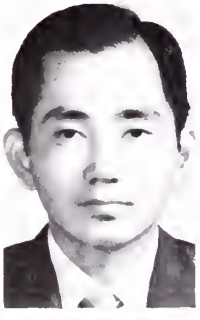
Gretes, John Constantine, M.D., Duke University School of Medicine, 1972. Reciprocity with National Board of Medical Examiners. Specialty: Internal Medicine.



Lorenz, Thomas Michael, M.D., University of California Medical School, 1973. Reciprocity with National Board of Medical Examiners.



Mazyck, Earle Farley, M.D., University of Virginia School of Medicine, 1971. Reciprocity with Virginia. Specialty: Internal Medicine & Hematology.



Huang, Chi-Tsou, M.D., Nat'l. Taiwan University College of Medicine, 1957. Reciprocity with Ohio (FLEX). Specialty: Physical and Rehab Medicine. Location: Birmingham.



Maassen, Martin Jay, M.D., Indiana University School of Medicine, 1974. Reciprocity with Indiana (FLEX).



McEwen, Michael Anderson, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Janzen, William Roy, M.D., University of Illinois College of Medicine, 1971. Reciprocity with National Board of Medical Examiners. Specialty: Ophthalmology. Location: Ft. McClellan.



Mali, Daryoush Jamshed, M.D., University of Freilburg (West Germany), 1967. Reciprocity with Florida. Specialty: Pediatrics.



McLean, Gwendellyn Lewellyn, M.D., Baylor College of Medicine (Houston), 1973. Location: Birmingham.



Miller, Neal Martin, M.D., Emory University School of Medicine, 1968. Reciprocity with Georgia. Specialty: Pathology.



Ogburn, Charles Lawton, Jr., M.D., Medical College of Georgia, 1973. Reciprocity with National Board of Medical Examiners.



Shenker, Charles Paul, M.D., University of Miami School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Moyo, Edwin Mapendla, M.D., Howard College of Medicine, 1971. Reciprocity with Georgia (FLEX). Specialty: Internal Medicine.



Purdey, Edward John Russell, M.D., Albany Medical College, 1952. Reciprocity with National Board of Medical Examiners.



Simpson, Michael Thomas, M.D., Medical College of Georgia, 1974. Reciprocity with National Board of Medical Examiners.



Newman, Donald Drennen, M.D., University of Alabama School of Medicine, 1973. Reciprocity with Georgia (FLEX).



Roberts, Curtis, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Smith, Milton Maurice, M.D., SUNY Upstate Medical Center College of Medicine, 1971. Reciprocity with National Board of Medical Examiners.



Nicolitz, Ernst, M.D., University of New Mexico School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Sanchez, Gabriel, M.D., Fac de Med Univ Bogota (Columbia, S. A.), 1964. Reciprocity with New York (FLEX). Specialty: OB/GYN & Anatomical Pathology.



Soyor, Muharrem Tanju, M.D., Ankara University Fac Med/Ankara (Turkey), 1965. Reciprocity with Virginia (FLEX).



Niles, Jack Kenneth, M.D., University of Tennessee School of Medicine, 1973. Reciprocity with Tennessee (FLEX).



Sheior, William Cornelius, Jr., M.D., Medical College of Georgia, 1967. Reciprocity with Georgia. Specialty: Urology.



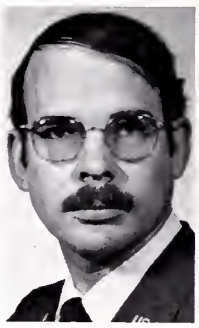
Spohr, Clifford Harold, M.D., University of Rochester School of Medicine, 1971. Reciprocity with National Board of Medical Examiners. Specialty: Radiology. Location: Phenix City.



Spratling, Larry, M.D., Tulane University School of Medicine, 1972. Reciprocity with Louisiana (FLEX). Specialty: Internal Medicine.



Veazey, Philip Ronald, M.D., Medical College of Georgia, 1969. Reciprocity with Georgia. Specialty: General Surgery.



Wells, Richard Jay, M.D., University of Virginia School of Medicine, 1969. Reciprocity with Virginia. Specialty: Pathology.



Stephens, David Bolam, M.D., Tulane University School of Medicine, 1968. Reciprocity with Louisiana. Specialty: General Surgery.



Walker, Howard Seaborn Jones, III, M.D., Baylor College of Medicine, 1974. Reciprocity with Texas.



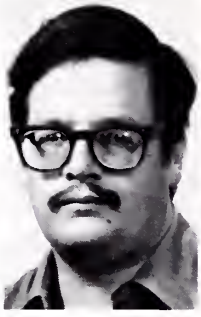
Welsh, Donald Wills, M.D., Medical University of South Carolina, 1974. Reciprocity with National Board of Medical Examiners. Location: Birmingham.



Summer, Robert Ovestus, M.D., Medical University of South Carolina, 1955. Reciprocity with South Carolina.



Weaver, Joseph William, M.D., Tulane University School of Medicine, 1966. Reciprocity with Florida. Specialty: Internal Medicine & Hematology. Location: Pensacola, Florida.



White, Ronnie Earl, M.D., University of Mississippi School of Medicine, 1974. Reciprocity with Mississippi (FLEX).



Toro-Leyton, Claudio Erasmo, M.D., Universidad de Chile de Medicina (Chile), 1964. Reciprocity with District of Columbia)FLEX). Specialty: Psychiatry.



Weaver, Richard Albert, M.D., Ohio State University College of Medicine, 1968. Reciprocity with Ohio (FLEX). Specialty: Family Practice.



Wilensky, Raymon Joel, M.D., University of Alabama School of Medicine, 1971. Reciprocity with National Board of Medical Examiners.



Vassiliou, Constantine P., M.D., National University of Athens (Greece), 1968. Reciprocity with Pennsylvania. Specialty: Diagnostic Radiology.



Webster, Edward William, M.D., Howard University College of Medicine, 1971. Reciprocity with Maryland (FLEX). Specialty: Internal Medicine.



Wilson, Charles Elmo, M.D., University of Alabama School of Medicine, 1974. National Board of Medical Examiners.



Auxiliary

Mrs. William D. Hughes
President

THE month of February brings to mind many things: cupids, candy, and collecting for the Heart Fund. Another significant event is the anniversary that marked the beginning of philanthropic romance with medical education when the Board of Directors of the newly established American Medical Education Foundation (AMEF) convened for the first time. A decade later, there was a marriage with the American Medical Association Research Foundation (AMRF) and the American Medical Association Education and Research Foundation (AMA-ERF) was born.

Today, the Foundation can boast of gifts of more than $25,000,000 in unrestricted grants to the nation's medical schools, and of guaranteeing over 53,000 loans worth more than $61,000,000 for medical students, interns and residents since its inception. Additionally, the AMA-ERF maintains funds for categorical research grants, scholarships and rural and community oriented health projects.

The work of the AMA-ERF is made possible only through the generosity of its contributors. Approximately two-thirds of its income is derived from concerned physicians and the spouses in the AMA Auxiliary. The remainder is obtained from foundations; pharmaceutical and other industries and businesses; and from the general public.

At the present time in Alabama, we are ahead $5,000 over the amount we had collected last year by this time—a total of $30,000 has been credited in Chicago for the state of Alabama through December—and we've got six months to go.

How is this money accumulated by our auxiliaries? Various ways, of course, and all of them respectable. The Jefferson-Birmingham Auxiliary sponsors a fashion show each year that nets several thousands of dollars. Many counties participate in the annual Christmas Sharing card which netted Lauderdale County around $800 this year. Nearly all of the auxiliaries take advantage of the memorial cards and send donations in the deceased names. Raffles, bazaars, tasting luncheons, bridge benefits, whatever—our auxiliaries all band together for this wonderful cause.

Medicine must not become a profession available only to the rich. This is why we must do our part in raising the funds for those who need our help.

This Valentine's Day give your sweetheart a big kiss and send a sweet donation to your local auxiliary for AMA-ERF.

Pres.-Elect—Mrs. George Scofield/1st Vice-Pres.—Mrs. Lewis Young/NW District Vice-Pres.—Mrs. Aubrey Terry/NE District Vice-Pres.—Mrs. Eugene Bradley/SE District Vice-Pres.—Mrs. Emil Wright/SW District Vice-Pres.—Mrs. Charles Weaver. ■

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AMA Offers Negotiating Classes

Eight negotiations training sessions planned for next year by the AMA Dept. of Negotiations will emphasize techniques, strategies, goals and tactics in negotiating with such outside forces as state and federal agencies, insurance carriers, hospital boards, and consumer groups.

Four of the seminars will be intensive five-day programs for state, county and specialty society executives and will be limited to 30 participants.

Two of these have been scheduled, one at the U. of New Mexico, Albuquerque, Feb. 16-20, and one at the Dow Conference Center, Hillsdale College, Hillsdale, Mich., April 26-30. Four shorter seminars for physicians will be announced soon. These two-day regional workshops will be limited to 125 physicians each. ■

IMMEDIATE OPENING

FOR GENERAL SURGEON in 206 bed general medical and surgical VA Hospital, Montgomery, Ala. U. S. Licensure (any state) required. Must be Board certified eligible. New Intensive Care Unit. Good medical library. Excellent fringe and retirement benefits including malpractice coverage. Will pay travel and moving expenses. New pay supplement now available. EEO Employer. Contact: Chief of Staff, VA Hospital, 215 Perry Hill Road, Montgomery, AL. 36109, Telephone Number (205) 272-4670.

IMMEDIATE OPENING

FOR GENERAL PRACTITIONER AT VA HOSPITAL, Montgomery, Ala. and similar position in satellite clinic, Mobile, Ala. Excellent fringe and retirement benefits including malpractice coverage. Good medical library. U. S. Licensure (any state) required. Will pay travel and moving expenses. New Pay supplement now available. EEO employer. Contact: Chief of Staff, VA Hospital, 215 Perry Hill Road, Montgomery, AL. 36109 Telephone Number (205) 272-4670.

IMMEDIATE OPENING

FOR INTERNIST IN 206 bed general medical and surgical VA Hospital, Montgomery, AL. Excellent fringe and retirement benefits including malpractice coverage. Good medical library. U. S. Licensure (any state) required. Must be Board certified eligible. New ICU, RCU and pulmonary function. Will pay travel and moving expenses. New pay supplement now available. EEO employer. Contact: Chief of Staff, VA Hospital, 215 Perry Hill Road, Montgomery, AL. 36109, Telephone Number (205) 272-4670.

CLINIC FOR LEASE

For Lease: A Dr.'s Clinic located at 1947 Warrior Rd., Bham, Ala.

For further information contact David Rogers 1st Nat'l Bank of Bham, Ala. Phone: 328-5120, Ext. 636.

for the inflamed phase of hemorrhoidal flare-up

Anusol-HC® Cream: Rx only. Each gram contains: Hydrocortisone Acetate 5.0 mg; Bismuth Subgallate 22.5 mg; Bismuth Resorcin Compound 17.5 mg; Benzyl Benzoate 12.5 mg; Peruvian Balsam 17.5 mg; Zinc Oxide 110.0 mg. Also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil and glyceryl monostearate. Non-staining.

Anusol-HC® Suppositories: Rx only. Each contains: Hydrocortisone Acetate 10.0 mg; Bismuth Subgallate 2.25%; Bismuth Resorcin Compound 1.75%; Benzyl Benzoate 1.2%; Peruvian Balsam 1.8%; Zinc Oxide 11.0%. Also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland, hydrogenated oil-cocoa butter base.

CAUTION: Federal law prohibits dispensing Anusol-HC® Cream and Anusol-HC® Suppositories without prescription.

for the maintenance and protection phase

Anusol Suppositories and Ointment: Except for hydrocortisone acetate, these forms contain the same percentages of active ingredients as listed above.

Contraindications: History of sensitivity to any component. Topical corticosteroids should not be employed in tuberculous, fungal and most viral lesions of skin (including herpes, vaccinia and varicella).

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy they should not be used unnecessarily on extended areas, in large amounts or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. When there is bacterial skin infection, topical corticosteroids should be used only with appropriate concomitant anti-microbial therapy. Prolonged or excessive use of corticosteroids might produce systemic effects.

Dosage and Administration: Anusol-HC Cream: *Adults*—Remove tube cap and attach the plastic applicator. After gentle bathing and drying of the area, apply to the exterior surface and gently rub in. For internal use, insert the applicator by applying gentle, continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories or Ointment.

Anusol-HC Suppositories: One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Anusol Suppositories: One in the morning, one at bedtime; and one immediately following each evacuation.

Anusol Ointment: Apply freely to the anoderm as often as necessary, usually 2 to 4 times a day.

Full information available on request.

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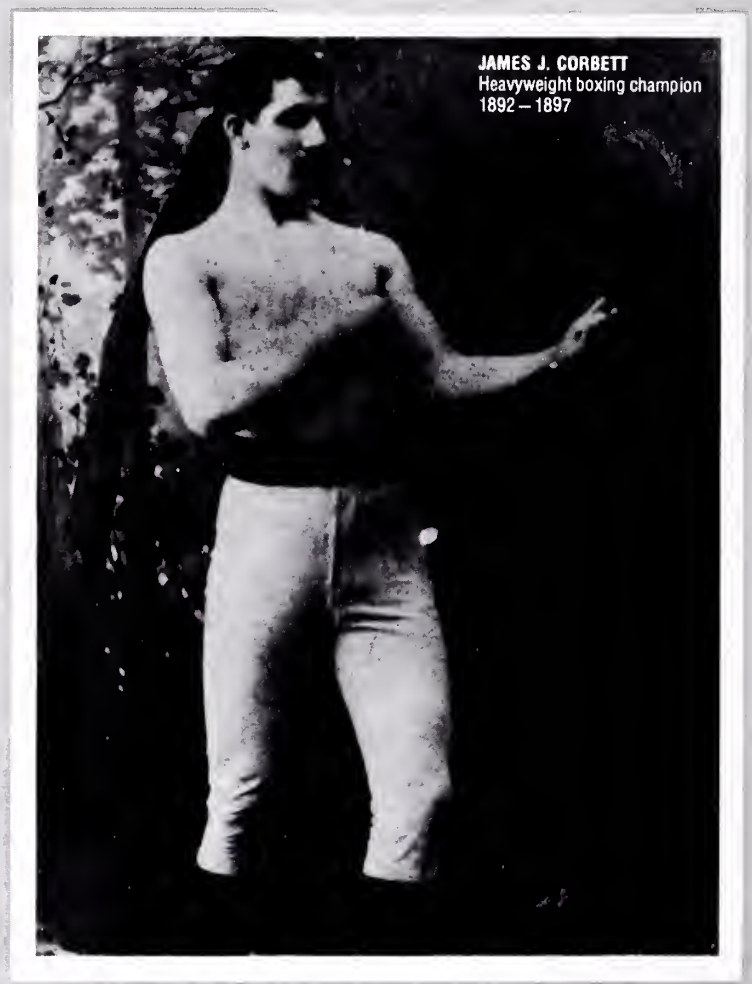
pain and burning respond in minutes

- without belladonna alkaloids
- without CNS stimulants



Artist's interpretation in bas-relief of external hemorrhoids, postoperative anorectal wounds and anal dermatitis.

Famous Fighters



NEOSPORIN® Ointment
(polymyxin B-bacitracin-neomycin)
is a famous fighter, too.

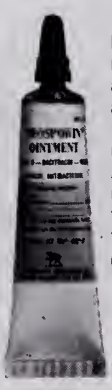
Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



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North Carolina 27709

Journal Readership Survey

Please answer the following questions and mail this sheet to *The Journal of the Medical Association of The State of Alabama,* 19 South Jackson Street, Montgomery, Alabama 36104.

1. Do you read THE JOURNAL?

   [ ] Not At All
   [ ] 25%
   [ ] 50%
   [ ] 75%
   [ ] Entirely

2. Which of the following sections in THE JOURNAL do you read? (Please check)

   Which five sections would you rate highest in order of priority? (Place numbers 1-5 in brackets next to your TOP FIVE choices):

   19 Views . . . . . ( )
   President's Page . . . . . ( )
   Editorials . . . . . ( )
   Letters To The Editor . . . . . ( )
   Scientific Section . . . . . ( )
   Around The State
   - Roster Supplement . . . . . ( )
   - Physicians' Placement Service In Alabama . . . . . ( )
   - Digest of Actions–Board of Censors . . . . . ( )
   - Newly Licensed Physicians . . . . . ( )

   Continuing Medical Education . . . . . ( )
   Dean's Report . . . . . ( )
   Alabama Department of Public Health . . . . . ( )
   Journal Features
   - Association Forum . . . . . ( )
   - Hobbies To Fill A Doctor's Leisure . . . . . ( )
   - Fathers and Sons In Medicine . . . . . ( )

3. Which section do you read the least? _____

4. Do you have any specific suggestions on how we might improve THE JOURNAL?

   _____

   _____

   _____

_____ YOUR SPECIALTY

_____ RESIDENT?

_____ STUDENT?



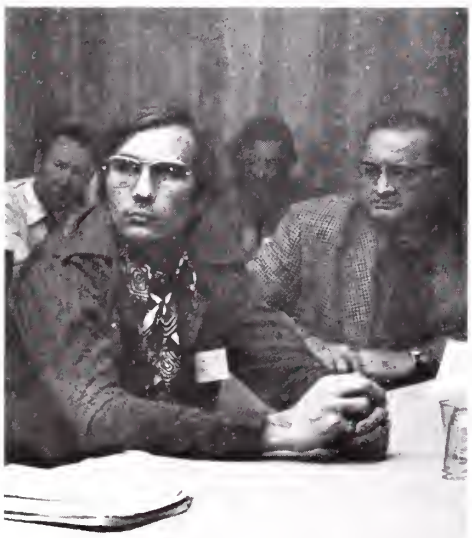




Continuing Medical Education



CME On A Regional Basis



By LARRY DIXON

MASA's Education Department recently concluded its first attempt at "Regionalization" with its final Hypertension Program which was produced at Joe Wheeler Lodge January 10-11, 1976. Physicians in attendance received information covering three aspects of Hypertension: the medical, surgical and obstetrical hypertensive patients.

Attendees were from an 11-county northwest Alabama target area and each received an individual invitation to the conference. They also received 10 Category I Credit hours for the Physician's Recognition Award or 10 AAFP Prescribed hours.

THE REGIONALIZATION PROGRAM is an effort by MASA's Council on Medical Education to provide quality continuing medical education for the physician at a location which is convenient to his patients, hospital and home. Alabama physicians are now becoming aware of the convenience of these Regionalized programs as well as their quality.

IT IS expected that the next topic to be developed and regionalized will be one concerning "Diabetes," a topic which crosses specialty lines and would be of general interest to physicians throughout the state. The Council on Medical Education is expected to finalize its plans and the department will begin developing the program very shortly.

The Hypertension Program recently completed was first produced at Gulf Shores in June, Lake Guntersville in December and at Joe Wheeler State Lodge in January. In the interium during the month of August, a mini-Hypertension Conference was conducted at Eufaula.

The next regionalized conferences will begin earlier in the spring and earlier in the fall. The Council has been utilizing Alabama State Parks for conference sites due to their location and attractiveness. ■



CME CALENDAR

MARCH

● March 3-6, Emory University School of Medicine—Urology, "Urology Seminar On Urologic Surgery," Marriott Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● March 6-7, 1976, "Pediatric Genitourinary Radiology," Montelene Hotel, New Orleans, La. Contact: Wanda Patton, Institute For Pediatric Radiology, 4148 N. Cleveland Ave., Kansas City, Mo. 4117. Category I Credit - PRA available.

● March 11-13, 1976, "Gynecologic Endocrinology", Department of OB-GYN - University of Tennessee, The Hilton Inn - Memphis Airport, Memphis, Tennessee, Category I credit available.

● March 12-13, 1976, Vanderbilt School of Medicine, "Head And Neck Tumors", Vanderbilt University, Nashville, TN. Category I PRA and AAFP Credit available. For further Info: Paul E. Slaton, M.D., DME; 305 Medical Arts Bldg. Nashville, TN 37212.

● March 14, 15, 1976: 4th Annual Conference on Perinatal Medicine, Callaway Gardens, Pine Mountain, Georgia. Contact: Dr. Micki L. Souma or Dr. Louis Levy, Perinatology Department, The Medical Center, Columbus, Georgia 31901.

● March 14-18, 44th Annual Assembly, Southeastern Surgical Congress, Marriott Hotel, New Orleans, Louisiana.

● March 24: Symposium on Medical Problems Common To Adolescents, Kahler Plaza, Birmingham. Presented by the Adolescent Unit of the Department of Pediatrics, UAB School of Medicine.

● March 24-27, 1976, American College of Physicians, "Hematology And Oncology, 1976", University of Mississippi School of Medicine, Jackson Hilton, Jackson, Mississippi. For information and registration: Registrar, Postgraduate Courses, ACP, 4200 Pine St., Philadelphia, Pa. 19104. Category I Credit - PRA is available.

● March 27, 1976, Vanderbilt School of Medicine, "Update In Anesthesiology," Vanderbilt University, Nashville, TN. Category I PRA and AAFP credit available. For further Info: Paul E. Slaton, M.D., DME; 305 Medical Arts Bldg., Nashville, TN. 37212.

● March 27-28, Tri-State Pathology Meeting, Gulf State Park Resort, Gulf Shores. Approved for CME Credit by ASCP.

● March 31-April 1, The University of Alabama, College of Community Health Sciences, "Decentralized Education In Family Medicine," Royal Sonesta Hotel, New Orleans, Louisiana. Category Credit Available. For Further Info: Ms. Mazie Blanks, College of Community Health Sciences, Box 6291, University, Alabama 35486.

● March 31 - April 3, 1976, University of Miami, "Renal Diseases And Hypertension," Americana Hotel, Bal Harbour, Florida. Category I PRA Available.

APRIL

● April 1-3, Emory University School of Medicine—Surgery, "General Surgical Approach To Vascular Disease," Omni International, Atlanta, Georgia, Category I Credit Available.

● April 2, 1976, Vanderbilt School of Medicine, "Postgraduate Course In Allergy," Vanderbilt University, Nashville, TN. Category I PRA and AAFP Credit available. For further Info: Paul E. Slaton, M.D., DME; 305 Medical Arts Bldg. Nashville, TN. 37212.

● April 5-7, Emory University School of Medicine—Pediatrics, "Neonatology For The Pediatrician," Grady Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 5-7, 1976, Medical Group Management Association, "Seminars On Medical Group Systems Development And Facility Design Construction And Financing," Maison Bupuy Hotel, New Orleans, La.

● April 5-8, 57th Annual Session, American College of Physicians, Philadelphia, Pa.

● April 8-10, Emory University School of Medicine—Obstetrics & Gynecology, "Gynecology Oncology and Instruction In Colposcopy," Crawford W. Long Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 8-10, Emory University School of Medicine—Orthopedic Surgery, "Techniques In Orthopedic Surgery," Grady Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 8-10, Emory University School of Medicine—Gastroenterology, "Three Days of Gastroenterology," (Sponsored by the American College of Gastroenterology), Royal Coach Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● April 8-11, 1976: Society of Obstetric Anesthesia and Perinatology, Annual Meeting. Orlando Hyatt House, Orlando, Florida. Contact: Dr. Charles Gibbs, Department of Anesthesiology, University of Florida, Box J-254, J. Hillis Miller Health Center, Gainesville, Florida 32610.

● April 15-17, 1976, 115th Annual Meeting Of MASA, The Governor's House, Montgomery, Category I Credit.

● April 19-22, Emory University School of Medicine—Cardiovascular, "The Treatment of Heart Disease," Royal Coach Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● April 21-23, 1976, Vanderbilt School of Medicine & American College of Physicians, "Physiologic Basis of Clinical Endocrinology," Endocrinology Center at Vanderbilt University, Nashville, Tennessee. Category I PRA and AAFP credit available. For further Info: Paul E. Slaton, M.D.; DME; 305 Medical Arts Bldg. Nashville, TN 37212.

● April 22-24, 1976: 2nd Annual Postgraduate Course "Diagnosis and Evaluation of the High Risk Pregnancy". Limited enrollment. Tuition. University of Louisville, Kentucky.

● April 23-24, "Management of Diabetic Complications," University of Kentucky Medical Center, Lexington. Registration Fee: $75 (2 days), $40 (1 day). Contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

● April 26-29, 4th Annual Spring Meeting, American College of Surgeons, Sheraton-Boston Hotel and the Statler Hilton Hotel, Boston, Massachusetts.

● April 28-30, Symposium on Gastrointestinal Radiology, Lexington Hilton Inn, Lexington, Kentucky. Registration Fee: $300. For further information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

● April 30-May 1, 1976, Vanderbilt School of Medicine, "Human Genetics," Vanderbilt University, Nashville, Tennessee. Category I PRA and AAFP Credit available. For further Info: Paul E. Slaton, M.D., DME; 305 Medical Arts Bldg. Nashville, TN 37212.

MAY

● May 10-13, 1976: American College of Obstetricians and Gynecologists, Annual Meeting. Dallas, Texas. Contact: ACOG, One East Wacker Street, Chicago, Illinois 60601.

ALABAMA DEPARTMENT OF PUBLIC HEALTH:

Bureau of Preventable Diseases

FREDERICK S. WOLF, M.D., DIRECTOR

MENINGITIS

During 1975, there was an outbreak of meningococcal meningitis and meningococcemia in southern Washington County around the community of McIntosh. Between January 1, 1975, and December 31, 1975, there were a total of seven cases with four deaths, with an overall attack rate of 75 cases per 100,000 population. The outbreak peaked in December with four cases including three deaths. A culture survey of part of the McIntosh community revealed a 10% carrier rate. All of the cultures from cases in the McIntosh area and from all of the carriers were sensitive to sulfa.

During the first week in January, personnel from the State and County Health Departments assisted by medical students from the University of South Alabama Medical School and Red Cross and local volunteers undertook a campaign to distribute sulfadiazine prophylaxis door to door throughout the McIntosh community. Since the distribution, disease surveillance has been tightened in Washington and Mobile Counties and to date no additional cases have been reported from the McIntosh area. There is no evidence of epidemic spread outside of McIntosh. A post-treatment culture survey was undertaken during the last week in January and the results are pending.

Meningococcal disease is endemic throughout the United States with attack rates varying between 0.5 per 100,000 and 2.5 per 100,000. When these sporadic cases occur, it is to be considered a normal event and is not considered to place the community at any increased risk of meningitis. However, it has been shown that the secondary attack rate is higher among immediate household contacts of proven cases of meningococcal disease than in non-household contacts.

The Center for Disease Control, therefore, recommends that chemoprophylaxis be carried out in households of proven cases, but should not extend beyond the immediate household. While penicillin remains the drug of choice for treating meningococcal disease, it does not reach high enough concentrations in pharyngeal secretions to eliminate the carrier state in household members.

To date only three drugs have been shown to be effective in eliminating pharyngeal carriage. These are rifampin, minocycline, and sulfa. Since many meningococci are resistant to sulfa and since minocycline has a high incidence of severe side effects, it is felt that rifampin is the drug of choice for prophylaxis of household contacts. Minocycline can be used in patients who understand and can tolerate the side effects. When antibiotic sensitivity studies indicate that the organism is sensitive to sulfa, sulfadiazine has proven to be an inexpensive and very effective method of eliminating household carriers.

SMALLPOX VACCINATION

The Center for Disease Control, Morbidity and Mortality Report, Vol. 25, No. 2, Jan. 17, 1976, contains this "Recommendation of the Public Health Service Advisory Committee on Immunization Practices":

"Smallpox Vaccination of Hospital and Health Personnel—Smallpox is now occurring only in Ethiopia, and there it is rapidly being brought under control. This is the result of intensive and systematic worldwide efforts to eradicate the disease.

"Since the risk of smallpox importation into the United States is now essentially *nil*, the Committee no longer recommends systematic programs of routine vaccination of hospital and health personnel (MMWR, 21:[25]).

"Vaccination is still necessary for travelers going to countries that require valid International Certificates of Vaccination, for travelers who have been in Ethiopia in the two weeks before returning to the United States, and for personnel of laboratories working with variola virus."

IMMUNIZATION

During the first years of life, children are at a higher risk of developing serious complications of certain infectious diseases than are older children. A child should be fully immunized by his or her second birthday. The results of a recent survey of school-enterers and two-year-olds are presented.

Pre-School

A survey was conducted during October, November, and December, 1975, to determine immunization levels against diphtheria, tetanus, pertussis, polio, measles, rubella, and mumps for two-year-old children. The State was divided into eight survey districts (1973 State Comprehensive Health Planning Districts), and a sample of 150 children was selected from each district. In addition, six metropolitan areas—Jefferson, Madison, Mobile, Montgomery, and Tuscaloosa Counties, and County Health Department District XI (Cullman, Lawrence, Limestone, and Morgan Counties)—were surveyed separately.

The sample was drawn from the 4,785 births which occurred in October, 1973. A total of 1,200 children were selected at random, with each county being allocated its number of participants based upon the percentage of the district's preschool population in that county. The survey was designed so that sample results would be reflective of the general population with 95 per cent confidence. Samples for each of the six metropolitan area surveys were drawn in essentially the same manner.

State-wide results of this survey indicate the following levels of protection:

DTP (3 or more injections)	83.0%—Up 1.1%
Polio (3 or more TOPV doses)	74.9%—Up 8.8%
Measles (1 injection)	75.7%—Up 5.1%
Rubella (1 injection)	73.9%—Up 4.3%
Total Protection (3 DTP, 3 TOPV, measles/rubella)	63.0%—Up 6.9%

Mumps protection was only 30.5 per cent, due to the unavailability of vaccine through public sources.

(CONTINUED ON PAGE 71)

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Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

Effectiveness across the spectrum of most common forms of insomnia

Awake too long, awake too often, awake too early...

These are the most common forms of insomnia, and may occur singly or in any combination. The night of troubled sleep depicted here comprises all three types. As the night progresses from left to right, each sleep stage is identifiable by its own shade of gray. Blue represents "Awake."

As you can see, this hypothetical "patient" takes well over an hour to fall asleep, awakens several times during the middle of the night and awakens too early in the morning.

Sleep Stages

- Awake
- REM
- Stage 1
- Stage 2
- Stage 3
- Stage 4



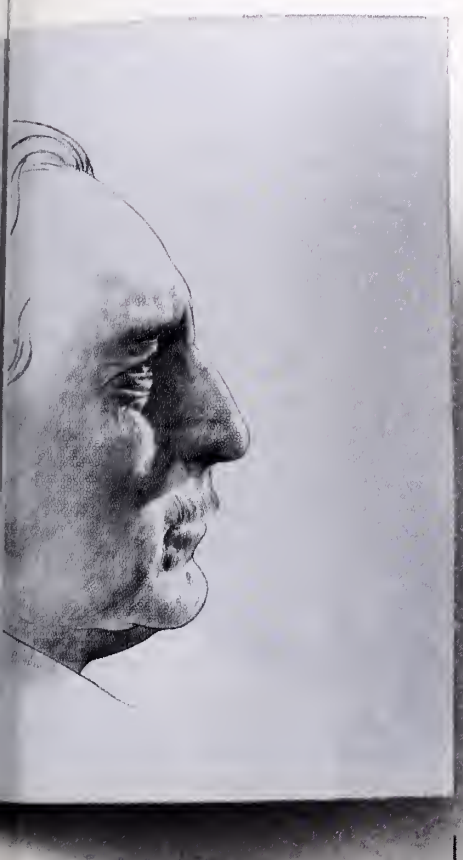
The insomnias most often occurring in young and older adults

For patients with trouble falling asleep (common in young adult insomnia patients), Dalmane (flurazepam HCl) 30 mg provides sleep within 17 minutes, on average. For those with trouble staying asleep or sleeping long enough (common in those over 50), Dalmane offers increased total sleep time with fewer nocturnal awakenings. These clinical results were demonstrated in studies conducted in four geographically separated sleep research laboratories.[1-4]

The relative safety of Dalmane (flurazepam HCl) is well documented

Dalmane (flurazepam HCl) is relatively safe and well tolerated; morning "hang-over" has been infrequent. The usual adult dosage is 30 mg; in elderly or debilitated patients, limit initial dosage to 15 mg to preclude over-sedation, dizziness or ataxia. Caution patients about possible combined effects with alcohol and other CNS depressants.

Broad-spectrum medication for the most common forms of insomnia



Awake too early



Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

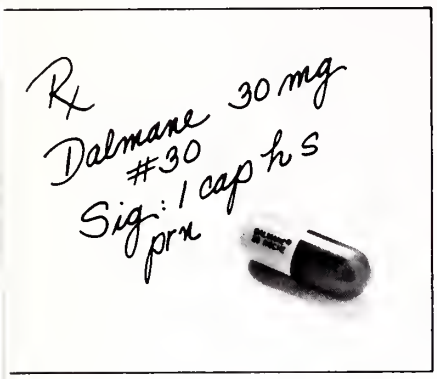
- ☐ induces sleep rapidly
- ☐ reduces nighttime awakenings
- ☐ lengthens total sleep time

ROCHE

Please see following page for a summary of complete product information.

Broad-spectrum medication for the most common forms of insomnia

Dalmane®
(flurazepam HCl) Ⓒ IV



Objectively proved in the sleep research laboratory, Dalmane

- induces sleep within 17 minutes, on average
- reduces nighttime awakenings
- provides 7 to 8 hours sleep, on average, without repeating dosage

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971
3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ



ROCHE

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

(CONTINUED FROM PAGE 66)

School Age

The 1975 school entrance immunization survey was compiled from reports sent to county health departments by public and private schools, and from reports sent by county health departments to the State Health Department. These reports show that 92.8 per cent of the children entering kindergarten and first grade in the State possessed the Certificate of Immunization, which indicates protection against diphtheria, tetanus, pertussis, polio, measles, and rubella. This level of total protection reflects a 5.62 per cent increase when compared to the 1974 results. The confidence level of this survey approaches 100 per cent, since the immunization status of all school children is individually evaluated.

STAPHYLOCOCCAL OUTBREAKS IN NURSERIES

During the last two months, two outbreaks of staphylococcal infections associated with newborn nurseries have been reported to the State Health Department.

On advice of the Center for Disease Control, we recommend the following procedures be used to control outbreaks of staphylococcal disease in newborn nurseries. The occurrence of (1) 2 or more concurrent cases of staphylococcal skin disease related to a single nursery, or (2) a single case of breast abscess in a nursing mother or infant is presumptive evidence of an outbreak and warrants further investigation, including survey of recently discharged infants, culture of all lesions, determination of antibiotic resistance, and phage type of all staph. isolates, and prompt reporting of the outbreak to local public health officials and our department. In such an outbreak, we recommend the following control measures:

1. Cases and suspect cases should be promptly isolated, cultured, and treated with systemic antiobiotics.
2. Staff handwashing with 3 per cent hexachlorophene (HCP) or an iodopher preparation between each infant contact, which should be in effect at all times, should be rigorously enforced during an outbreak.
3. A cohort system of nursery admission should be in effect at all times. In such a system, all well babies, born during a period no longer than 48 hours, are admitted into a single unit until it is filled. Babies born during the next 48-hour interval are then admitted to a second unit. Meanwhile, as infants are discharged, the first unit is emptied and cleaned before another cohort is admitted there. Before admitting new patients, nursery furniture and equipment should be thoroughly washed and disinfected with a phenolic or iodophor germicidal detergent. Instruments and basins should be autoclaved and bedding and diapers should be laundered prior to reuse. In addition, there should be cohorting of personnel, especially during an outbreak. Another method of cohorting, suggested only for outbreaks, is to culture all infants and personnel for staph. and to have all infected infants and personnel placed in a different room than those who are not infects.
4. Short-term, prophylactic bathing of healthy newborn infants with 3 per cent HCP, no more than once daily. Washing must be followed by thorough rinsing with tap water. Extended HCP use in infants who require prolonged hospitalization should generally be avoided. HCP baths should be limited to 5 and discontinued on discharge from the nursery. HCP should be used with particular caution with infants weighing less than 2000 grams.
5. It may be useful to monitor the frequency of staph. colonization of infants by umbilical culturing at time of hospital discharge. This should be done only during and shortly after an outbreak, and should be discontinued within 2-4 weeks afterward.
6. During an outbreak, surveillance of infants should be continued for at least 30 days after discharge.
7. All personnel working in the nursery or entering it at any time should be questioned and examined for possible staphylococcal lesions. Anterior nares of all persons contacting babies should be cultured.
8. Crowding of infants and shortages of nursery personnel are frequently associated with staph. nursery outbreaks. If present, these should be evaluated and minimized.

(CONTINUED ON PAGE 72)

WANTED: PHYSICIAN IN ADJUDICATIVE MEDICINE

Veterans Administration Regional Office, Montgomery, Alabama. Equal Opportunity Employer. Position in Federal career civil service at grades GS-12, beginning salary $25,200 per annum. Liberal fringe benefits, regular 40-hour week office work. Reply to O. N. Frederick, Personnel Officer, VA Regional office, 474 S. Court St., Montgomery, AL 36104. Telephone 832-7184.

ADVERTISEMENT FOR PHYSICIAN FACULTY

Physician faculty positions open in community-based clinical program for third-and-fourth-year medical students and large family practice residency program. Openings are either immediate or July 1, 1976. The following positions are available:

Psychiatry—Chief of Service and 2 Asst. Prof.
Int. Med.—Chief of Service and 2 Asst. Prof.
Pediatrics—2 Asst. Prof.
Community Med.—2 Asst./Assoc. Prof.
Surgery—Chief of Service.

Applicants should be board eligible or certified and eligible for Alabama licensure. Send resume and information request to: W. R. Willard, M.D., Dean, College of Community Health Sciences, The University of Alabama, P. O. Box 6291, University, Alabama 35486.

The University of Alabama is an affirmative action/equal opportunity employer.

(CONTINUED FROM PAGE 71)

CURRENT MORBIDITY STATISTICS—1976

	December	January	*E.E. January
Tuberculosis	43	93	76
Syphilis	50	25	40
Gonorrhea	1,832	1,776	697
Chancroid	0	0	0
Typhoid fever	1	0	0
Salmonella	28	37	16
Undulant fever	0	0	0
Shigella	7	9	7
Amebic dysentery	0	0	0
Scarlet fever & strep. throat	559	817	514
Diphtheria	0	0	0
Whooping cough	3	0	2
Meningitis	20	11	8
Tularemia	0	0	0
Tetanus	0	0	0
Poliomyelitis	0	0	0
Encephalitis	61	3	0
Smallpox	0	0	0
Measles	0	0	4
German measles	0	0	13
Chickenpox	33	66	78
Mumps	27	34	73
Hepatitis	27	45	37
Typhus fever	0	0	0
Rocky Mt. spotted fever	2	0	0
Malaria	0	0	1
Rheumatic fever	52	51	9
Rheumatic heart	14	10	15
Influenza	26	106	3,035
Pneumonia	344	507	511
Rabies - Human cases	0	0	0
Pos. animal heads	5	1	0

As reported by physicians and including deaths not reported as cases.

*E.E. - The estimated expectancy represents the median incidence of the past nine years.

GONORRHEA—DECEMBER, 1975

Total Female Specimens	17,909
Positive Cultures	897
Positive	5.0%
Submitted from Private Practice	10,584
Positive Cultures	245
Positive	2.3%

DARKFIELD MICROSCOPY
is available to physicians at no cost by calling 832-3205 collect at any time. A technician and equipment will be dispatched to your office.

Digest of actions—State Committee of Public Health

The State Committee of Public Health at its regular meeting on February 18, 1976, took the following actions:

- Confirmed three Deputy Registrars for Vital Statistics.
- Endorsed a Health Data Systems Contract Application by Comprehensive Health Planning.
- Approved summary plan for STate-wide Family Planning Project for FY 1977 including fee schedule as required by HEW.
- Confirmed appointment of Dr. James Walker as Chambers County Health Officer effective February 25, 1976.
- Approved UAB Hospital request for Invalid Coach License with use limitation only for transfer between UAB facilities.
- Approved EMT Advanced Training Program for George C. Wallace State Community College, Dothan.
- Confirmed interpretation of regulations of hospital and nursing home space outside patient bedroom windows. Referred to Bureau of Licensure and Certification for consideration of changes to be proposed in the rules, Regulations and Standards for Hospitals and Nursing Homes, after consideration by Hospital Licensure Advisory Board.
- Concurred in proposed format for the Alabama Master Hospital Plan.
- Approved construction of East Alabama Rehabilitation Center, Opelika, for a Hill-Burton Grant of $270,000 pending affirmative approval of review agencies.
- Approved proposal for additional beds to the Gadsden Nursing Home, Gadsden, and a Certificate of Need to Physicians' Care Center, Gadsden, for construction of new facility.
- Approved a Home Health Care Agency to care for patients discharged from the Brookwood Medical Center, Homewood.
- Agreed that an Assurance of Need for facilities at St. Martin's in the Pines, Birmingham, was not essential since there is no application for Medicare or Medicaid reimbursement pending at this time.
- Approved Medicaid Plan Amendments dealing with minors in private psychiatric facilities.
- Approved an increased dispensing fee for Western Health Center, Jefferson County Department of Public Health Pharmacy.
- Adopted the Maximum Allowable Cost (MAC) – Estimated Acquisition Cost system (EAC) – to begin when Federal Regulations become effective April 26, 1976.
- Adopted the Cost Limitation for Designated Multiple Source Drugs to allow "no exception to Maximum Allowable Cost for Multiple Source Drugs without prior authorization being obtained from MSA."
- Deleted all non-legend (OTC) products from the Alabama Drug Code Index, except Insulin and iron preparations.
- Added list of drugs to Alabama Code Index to update the listing and provide for certain drugs, many of which will be Multiple Source Drugs and subject to MAC.
- Approved a change in regulations regarding Chemical Test for Intoxication Act, IV. E. providing for the permit to be issued for a period not to exceed two years as an administrative economy measure.
- Received request for reintroduction of the Abortion Control and Regulation Bill previously approved and supported by the State Committee of Public Health.
- Requested MSA to supply progress report on the top ten professional providers under Medicaid and evaluation of efforts to control over-utilization wherever possible.

Is there a tablet containing *only* an expectorant and *only* Glyceryl Guaiacolate? YES!

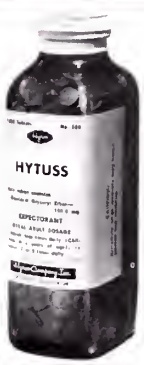
HYTUSS TABS

(GLYCERYL GUAIACOLATE 100mg.)

1. Patient acceptable tablet dose.
2. Single entity expectorant.
3. Measured tablet dose.
4. Sugar-free tablet.

An identifiable white, scored tablet which significantly stimulates the secretion of respiratory tract fluid.





Composition: Each sugar-free compressed tablet contains glyceryl guaiacolate 100mg. **Action and Use:** This preparation utilizes the effective expectorant action of glyceryl guaiacolate which significantly stimulates the secretion of respiratory tract fluid. The increased flow of less viscid fluid favors expectoration and has a demulcent effect on the tracheobronchial mucosa. The primary usefulness of Hytuss Tabs is to promote the change from a dry, unproductive cough to a productive cough. Hytuss is therefore useful in treating coughs due to the common cold, bronchitis, laryngitis, tracheitis, pharyngitis, influenza and the measles. The expectorant action of Hytuss may also provide symptomatic relief in some chronic respiratory disorders when the patient experiences spasms of dry nonproductive coughing. **Precautions:** Extremely large amounts may cause nausea and vomiting. **Administration and Dosage:** *Adults*—1 tablet four times daily. *Children*—6 to 12 years of age; ½ tablet 3 or 4 times daily. HOW SUPPLIED: White, scored, sugar-free, tablet in bottles of 100 - 1,000 - 5,000. **Product Identification Mark:** Hy. **Literature Available:** On request.

Available through all drug wholesalers.

Hyrex

HYREX COMPANY

832 South Cooper
Memphis, Tenn. 38104

(CONTINUED FROM PAGE 16)

DEAN'S REPORT

offers an opportunity for Family Practice training by providing:

64 students per year.

Family Practice faculty positions.

Funding and an organizational structure for an adequate Department of Family Practice.

Required and elective time in the undergraduate curriculum.

Facilities, funding and support for Family Practice residency training programs.

And a faculty that is generally supportive of the Family Practice movement.

The future depends upon the ability of the Family Practice Department, together with the support of interested family practitioners, to develop programs, recruit and develop faculty, and "deliver the goods" – a well-trained family physician. ■

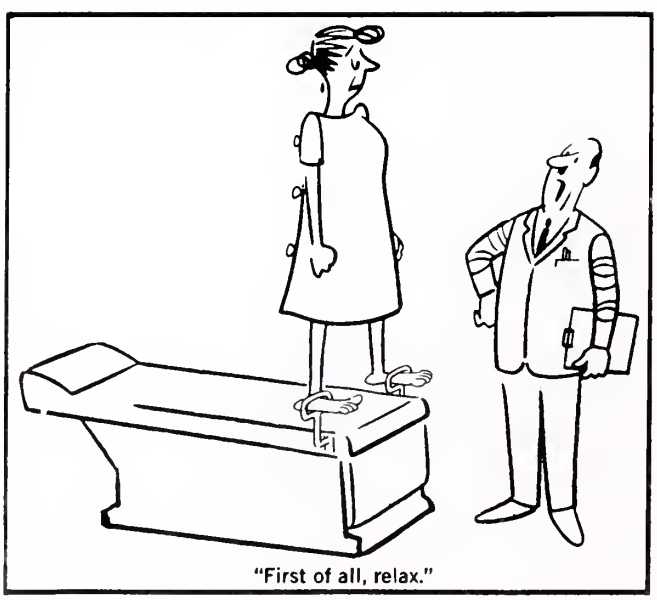
(CONTINUED FROM PAGE 4)

19 VIEWS

to streamline the processes of organization and administration. Dozens of committees and subcommittees have been discarded, to be replaced by Councils which are small in number but large in experience and competence. These Councils deal with matters of transcendent importance to every practitioner of medicine.

Additional duties and responsibilities have been heaped upon the shoulders of the elected officers. The President, President-Elect, Immediate Past President and Vice-President have been constituted ex-officio members of the Board of Censors. By attrition the Board of Censors has reduced its members from 15 to 12 to conform with the provisions of Act No. 762 (Regular Session 1973) which reorganized the State Committee of Public Health.

The streamlined mechanism determined by the 1975 College of Counsellors and House of Delegates as best designed to serve the medical profession is now one year old. The 1976 College and House soon will have an opportunity to decide whether the new structure has fulfilled its expectations. ■



"First of all, relax."

Dr. Hill Receives UAB Medical Center Award



Dr. S. Richardson Hill, Jr., Vice President for Health Affairs and Director of the UAB Medical Center, has been selected by his colleagues as the 1976 Distinguished Faculty Lecturer. The Award is the highest honor the Medical Center can bestow upon one of its members.

Dr. Hill, also Director of the University of Alabama System Medical Education Program, came to Birmingham in 1954 following a year as an assistant at the Harva Medical School. He was appointed Dean and Professor Medicine in 1962 and in 1968, he became Vice Preside for Health Affairs and Director of the Medical Center.

The annual Distinguished Faculty Lecturer is selected a committee which represents all divisions of the Medi Center. It was established to recognize faculty membe who have advanced frontiers of the health sciences a contributed to the growth of UAB. ■

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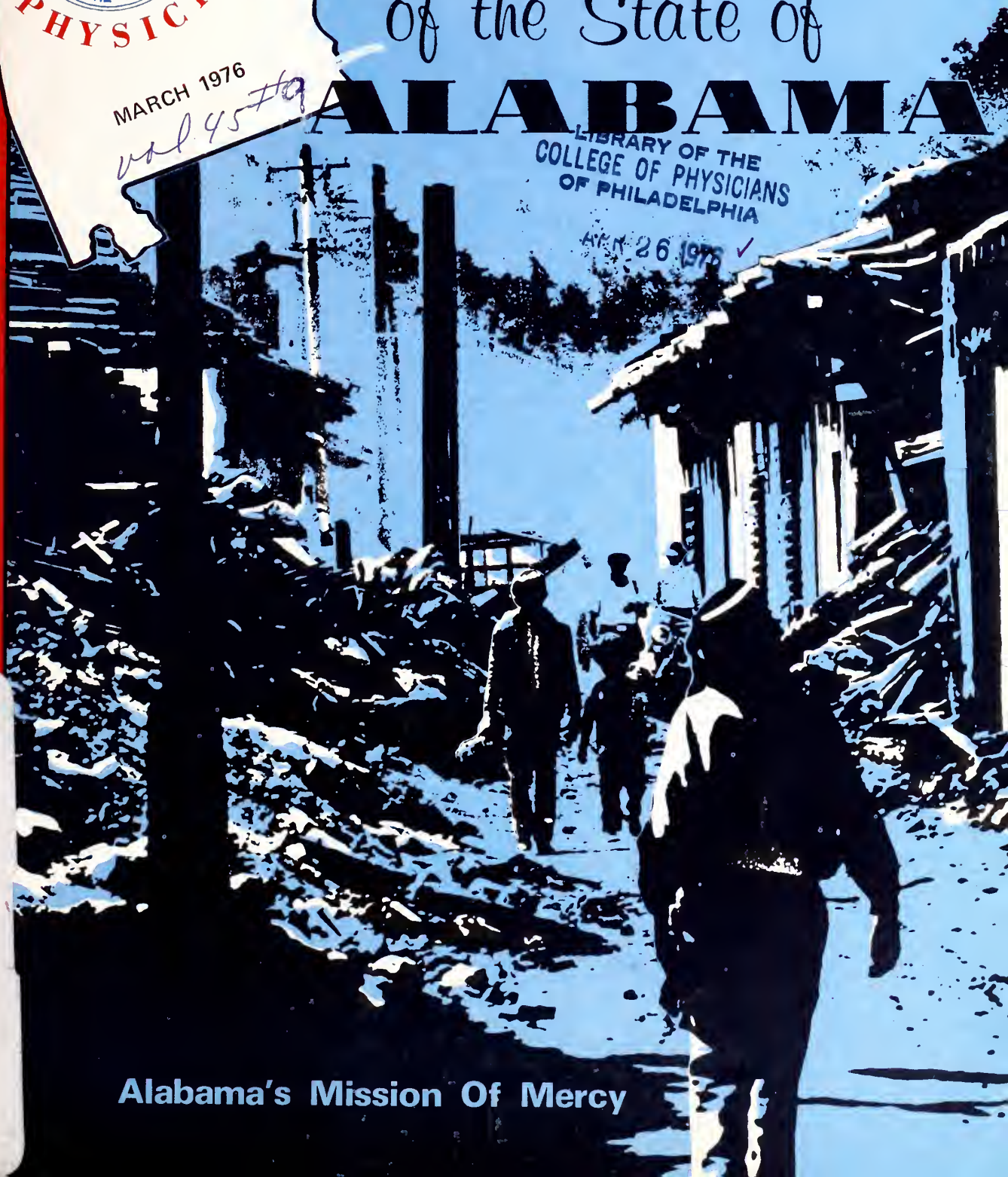
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Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium®
(diazepam) Ⓘⓥ

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

ROCHE

Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

The JOURNAL

of the

Medical Association of the State of Alabama

VOLUME 45, NUMBER 9 MARCH 1976

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price $12.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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Kenneth Yohn, M.D. . . . . Eufaula

State Health Officer

Ira L. Myers, M.D. . . . . Montgomery

Delegates to the American Medical Association

(Terms expiring December 31 of year shown)

1975

Delegate—O. Emfinger, M.D. . . . . Union Springs

Alternate—E. B. Glenn, M.D. . . . . Birmingham

Delegate—Paul W. Burleson, M.D. . . . . Birmingham

Alternate—J. Michaelson, M.D. . . . . Foley

1976

Delegate—W. E. White, M.D. . . . . Anniston

Alternate—Alfred Habeeb, M.D. . . . . Birmingham

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YOU WILL BE seeing it parked outside your county society or hospital staff meeting room very soon.

We are talking about the new van-type vehicle recently purchased by the Medical Association of the State of Alabama and customized to hold all of the equipment and materials required by the Education Department to produce first class Category I continuing medical education for the physician-members of this Association.

Details of the program are now being developed by the Council on Medical Education composed of Drs. Margaret Klapper, Martin Putnoi, G. L. Spafford, W. D. Lazenby and R. L. Dorrough.

The vehicle, equipment and a complete library of educational materials have been purchased with funds generated from MASA's participation as servicing agency for the malpractice insurance program. Costs of operations will be borne from the same source with any additional expenses derived from membership dues.

IT IS ANTICIPATED that a full range of Category I programs can be made available to every member of this Association at, or very close to his place of practice, thus relieving him of the necessity to travel great distances at considerable expense to receive the postgraduate courses deemed essential to his continuation in practice.

Physician lecturers and moderators will be obtained from the areas in which the programs are being presented, thus further reducing the cost to both MASA and the sponsoring bodies.

Mr. Larry Dixon, Director of the Department of Continuing Medical Education, will, at the outset, be in immediate charge of both equipment and presentation of the fully-accredited programs. If the activity proves feasible and popular, if the demand from physicians in the grassroots is sufficient, there is no reason to doubt whether this program can be made on going in every section of the State throughout the year.

It may take more manpower and more equipment, but experience has shown that MASA has been able to rise to meet any need when demanded by its membership. ■

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The Lion Which Sleeps At Night



E. VERNON STABLER, SR., M.D.

The lion which sleeps at night is unaware of what is taking place in his domain. The advantage is with the enemy!

Our Annual Convention is set for April 15 - 17, in Montgomery. Will you be there? This meeting holds many valuable and volatile reasons for your attendance and active participation. The Orientation Program is inviting and informative. The Scientific Program is approved for nine Category-I credit hours. The camaraderie can and will be very inviting. The social and entertainment programs to be enjoyed by everyone are well planned and will be excellent. Valuable updating in information and outlook is available in the commercial and scientific displays. Montgomery County Medical Society is going all out to make this an exceptional meeting.

ALL OF THESE good things invite your attendance at the annual session but there is another far more important matter that demands it! Let us be very serious with each other and with our Association this particular year.

The very makeup and philosophy of the Alabama doctor is "let the elected officials attend to it." Basically, our profession does not like to become involved in political finaglings—the adjuvant positions—the compromising and seeking of favors. We want to practice medicine and let other things alone and in return be let alone ourselves. This is a noble, philosophical ideal, but the reality to which we are now abruptly awakened is the fact that while we were letting the other fellow alone to "do his own thing," he had begun to meddle with our rights to do the same.

To what have we really awakened? There are more specific forces than we counted on or realized confronting us, which are trying to name the piper, call the tune, and then dictate how, when, and at what price we are to "dance to their piper's tune." We started late—embarrassingly late—to protect ourselves. Fortunately, however, all is not lost. We can yet effectively salvage much in the vital areas through diligent attention to our influence, political input, and albeit, legal recourse.

SLOWLY, the lion is beginning to awaken. No longer is it acceptable to expect our officials, our staff, our appointed committees to be the only ones to "carry the mail." With them rightly rests the responsibility for organization and leadership, but from that point on we must share the load. Never before has it been so important that each physician act. What a real force we can be to protect our medical world if we arise as a single vibrant unit!

Only the aroused and vocal lion is effective; only an awakened and articulate MASA can guide and protect the future of our medical freedom together with the right to exercise it without third party controls. When the bureaucracy wears a coat of sheep's wool, only strength can expose the covered fangs of the wolf underneath, promulgating "the new regulations."

The annual meeting in April is the rallying point. What an impression we can make with 1500 to 2000 doctors there, each showing informed interest and concern, dedicating our Association to being the vital influence it should be.

IS THERE YET one medical doctor in the State of Alabama who is not aware of the needs of our profession? Our concern is not merely to protect our own interests, but as the Master Physician surely sees and knows, if we are to fulfill our sacred commitment, we must protect the medical care of the sick and infirm in a free atmosphere, unshackled, and working to advance as well as to serve.

I ask sincerely that **you** be there in April—the lion must not sleep, his powerful voice must be heard!

E. Vernon Stabler

The Month In Washington

FORD'S MEDICARE PROPOSALS—Opposition to the Administration's proposals to change Medicare appears to be almost universal on Capitol Hill. The AMA, the AHA, the AFL-CIO, the National Council of Senior Citizens are among many organizations that have joined in assailing the President's proposals.

The Administration has asked Congress to approve a new catastrophic benefit for Medicare coupled with much higher cost-sharing, to impose percentage "caps" on Medicare reimbursement for hospitals and physicians and to change Medicaid into a block grant program for states.

Raymond T. Holden, M.D., Chairman of AMA's Board of Trustees, said "The proposed changes would not only be impractical, but would also be inherently unfair to all parties concerned. Unfortunately, the unfairness would be especially hard upon the beneficiaries of the Medicare program."

"To impose such arbitrary limits on only one segment of the economy and then to expect a continuation of beneficiary satisfaction for having benefits paid by Medicare (as promised by the program) is naive. The health care sector of our society cannot operate in a vacuum. It is subject to the same costs of living and costs of doing business as is any other segment of society."

"Providers and physicians cannot be subject to ever increasing regulations and requirements...and yet be expected to keep charges at less than cost levels. These special requirements are on top of the inflationary problems faced by them along with everyone else."

CATASTROPHIC INSURANCE—The sounds of a catastrophic-only national health insurance plan for this year still reverberate through Senate halls.

Senate Majority Leader Mike Mansfield (Mont.) and Rep. Leader Hugh Scott (Pa.) recently agreed during a joint television appearance on backing catastrophic and on predicting it has a good chance of clearing Congress this year.

Chief Congressional sponsor of a catastrophic-oriented plan—Sen. Russell Long (D.-La.)—said in a separate appearance that he believes Congress will approve his bill this session. Congress will go beyond what President Ford recommended in the way of catastrophic benefits for Medicare beneficiaries, Long said, and extend the concept to all Americans.

LAB KICKBACK—A Senate report charges that some clinical laboratories involved in Medicaid have operated on a kickback basis with physicians and clinics.

Chairman Frank Moss (D.-Utah) of the Senate Special Committee on Aging said the report "concludes that, at least in the states which came under investigation, kickbacks are widespread among labs specializing in Medicaid business. In fact, it appears necessary to give a kickback to secure the business of physicians or clinics who specialize in the treatment of welfare patients."

The report focussed on Illinois. Other states mentioned were New York, New Jersey, Michigan, California and Pennsylvania.

A staff witness told the Committee that the staff estimates that at least $45 million of the $213 million Medicare-Medicaid payments to clinical laboratories is either fraudulent or unnecessary. Average kickback was 30 per cent of the lab's charge, the report estimated.

In response to numerous press queries generated by the Committee's report including a filmed version of the charges carried nationally by CBS's program "Sixty Minutes," Max H. Parrott, M.D., AMA President, made the following statement:

"I would remind physicians and the public alike that the AMA Code of Ethics is very clear on the matter of laboratory charges.

"The physician's ethical responsibility is to provide his patients with high quality services. As a professional man, the physician is entitled to fair compensation for his services. But he is not engaged in a commercial enterprise and he should not make a markup, commission or profit on the services rendered by others.

"If after due process a physician is found to have violated the Code of Ethics in this or any other respect, he is fully liable for whatever professional penalties may be imposed, in addition to whatever penalties may be imposed by law." ■



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Letters to the Editor

Concern Over MASA Direction

I am writing because of my concern over what has happened to the medical malpractice insurance situation in Tennessee and more particularly because Alabama seems to be entering the first phase of the exact sequence which led Tennessee to the disasterous situation in which it now finds itself.

I plan to return to my home state of Alabama in July to begin the practice of orthopedic surgery. However, I fear that the situation in Alabama could approach or become more serious than that in Tennessee and thereby make it extremely difficult for me to do so.

Three years ago in Tennessee, $200-$600, with a $5 million umbrella cost orthopedic surgeons approximately $2000 per year. Two years ago the same coverage cost $6000.

One year ago, Shelby Mutual, the only medical malpractice carrier in Tennessee, served notice that no new policies would be written in the state. Then, they announced their intention to discontinue all medical malpractice coverage in Tennessee. Immediately, 26 small hospitals in rural areas served notice that they would have to close their doors upon loss of coverage.

The state then formed an assigned risk pool (JUA) and became the only supplier of medical malpractice insurance in Tennessee. The pool is funded by Tennessee's physicians with a resulting rise in the premium for an orthopedic surgeon to $30,000 with a percentage over that for partnerships and groups. The coverage is $200-$600 with an umbrella (when available) of a maximum of $1 million.

The results as I see them will be: (1) a new physician can hardly set up a solo practice in Tennessee any more; (2) Some physicians will have to retire early and others will have to either leave the state or just quit;

(3) Those continuing in practice will tend to do nothing but the simplest of surgical procedures and treatments. Defensive medicine is, of necessity, already becoming the accepted norm. Consultations are more widely used and patients are unfortunately looked upon not only as someone to be helped but also as potential adversaries in court; and

(4) Medical students, interns and residents will have to interrupt their training in Tennessee in hopes of finishing in other states and no new ones will be able to come into the state without prohibitive risk of their financial well-being for the rest of their lives.

The only solution obvious to me and to many others is immediate and effective legislation, since greed is not likely to soon vanish from the hearts of those who are destroying American medicine by their irresponsible use of the courts to bleed it to death.

Some suggested legislation follows: (1) Set up a reasonable upper limit on claims, perhaps geared to Workman's Compensation or averaged disability insurance figures; (2) Require insurance carriers to supply coverage as high as the maximum claim limits (and not on a claims-made basis);

(3) Set a reasonable statute of limitations, such as one year from the time of injury and have a clause requiring that the case be forever closed if a parent or guardian of a minor child decides not to sue. Further state that the child cannot bring the case up again years later when he or she is no longer a minor; (4) Establish reasonable controls on contingency fees; (5) Do not allow insurance carriers to settle out of court unless the defendant gives them permission in writing to do so; and

(6) Establish a governmental compensation system which would allow juries to give aid to plaintiffs for whom they feel sorry without having to find guilt of malpractice where none exists. (I understand that Florida may already have such a system.)

The above may seem a bit harsh—and it is. However, if quick and effective limitation is not placed on those who have chosen to misuse their rights in the civil courts, everybody will suffer the most dire consequences.

I would like to do all I can to encourage this legislation. A copy of the essential text of this letter has been addressed to Governor Wallace and to Mr. Forrester, the State Insurance Commissioner.

Wyatt O. Simpson, Jr., M.D.
Knoxville, Tennessee

Support Given To Life-Saving Project

On behalf of the Montgomery Restaurant Association, I would like to thank MASA for providing a guest speaker at our February meeting.

The presentation on the Heimlich Maneuver was both interesting and informative to our profession. Hopefully, should the occasion ever arrive, it will help us save someone's life.

We look forward to working closely with the Medical Association of the State of Alabama in distributing to all eating establishments in Alabama charts and materials illustrating the application of the Maneuver. It will be one of our most important projects to date and one which is so important to all Alabamians.

During my association with the Montgomery Restaurant Association, we have never had a subject draw such interest and participation among our members.

Thank you for helping to make my first meeting as President such a success.

Tom Pennington
President,
Montgomery Restaurant Association

North, South, East and West

Members of MASA's Council on Medical Education were most gracious in auditing the presentation for the Alabama Affiliate of the American Diabetes Association. I would like

(CONTINUED ON PAGE 47)



Photos courtesy The Birmingham News, James E. Jacobson, Managing Editor.

GUATEMALA is a country of about six million people. They have a very mild climate, often referred to as the "Land of Eternal Springtime." It is the mild climate and other physical attractions that are so alluring to many of the visitors.

Guatemala is a country which is largely mountainous and the majority of the people tend to live in the mountainous areas. This may explain the existence of some of the problems which affect the country socially, economically and medically.

I was there for two weeks. The trip ended three days before the devastating earthquake hit on February 4, 1976. I think that if I had been there at the time of the earthquake, I would probably be there yet to do what I could to assist those who suffered so many misfortunes.

THE DEVASTATION was enormous. Damage to roads, communications and housing was extraordinary. The towns were literally flattened. In one town, for example, all of the buildings were destroyed except for one church building. In other towns, the destruction was so extensive that they will have to be rebuilt from scratch.

My primary reasons for visiting Guatemala were (1) as a tourist, to see a country I had never visited before and to examine its social and medical structure, and (2) to work as a medical missionary in a clinic about 35 miles from the Mexican border by road, out in the boondocks.

I suppose it was really a selfish thing that I went for, because I wanted to see things for myself, to do what I could so that I would experience the so-called "inner glow" that comes from being able to give something you have to somebody who does not have it.

The medical problems of the country center around those kinds of problems which affected the United States and other developing nations a good number of years ago. To a large extent, they are of a public health nature, including such problems as sanitation; distribution of food, or better still, maldistribution of food; and the battle against preventable illnesses in the sense of immunizations.

AN IMMUNIZATION program of national scope is beginning to get underway. It was to have started again in February on an annual basis but because of the earthquake, I would suspect that it has been postponed. The majority of youngsters in Guatemala have had no immunizations whatsoever.

Of the six million people in Guatemala, 55 per cent are of Mayan origin, deriving directly from the original Mayan Indians who were living there at the time the Spanish Conquistadores came into the country in the 16th century. These people are divided into 22 tribes, speaking 22 distinct, separate languages, each one incomprehensible to any other tribe and, of course, anywhere else in the world. They are distinct, colorful, plain, delightful folk, the majority of whom depend upon agriculture for a living. The other 45 per cent are either mixtures of Guatemalan-Mayans or people of Spanish-Latin extraction, and a few are immigrants from other countries.

Illiteracy is wide-spread. It is said that approximately 67 per cent of the people neither read nor write. This is probably a conservative figure. I would suspect it to be more. Schooling is required to the sixth grade, but is frequently overlooked.

Most of the homes in the rural villages center around an area known as the "central market," with the other usual municipal structures—small town hall, a couple of churches and a number of stores. Along the countryside, the houses are just peppered up and down the hills.

THE WATER SUPPLY in many of the villages is through a central fountain, although as the village begins to grow, central water supply with piping is made available. Sewage is much less available. In the villages, sewers in each home (or most of the homes) are just now being installed with a central disposal plant.

Out in the rural areas, however, water supply is haphazard and is gathered from streams and carried by hand or on the head. Water is a precious commodity and is used sparingly. Toilet facilities are either primitive or lacking entirely in the rural areas and the nearby cornfields are frequently used for disposal. I suppose you would have to say that this makes walking in the fields at night a little hazardous.

This is not a very good system, as could be imagined, because it results in a high incidence of intestinal parasitosis. Intestinal parasites in children are probably universal in the rural areas and are probably very high even in the urban areas. Among the chief parasites would be included tapeworm, whipworm, ascaris, hookworm and occasionally pinworms. Also noted are protozoans, such as amoeba.

By ARTHUR A. STAMLER, M.D.
Pediatrician, Decatur, Alabama

Medical Mission In Guatemala

The major killers of children in Guatemala are the following: (1) Respiratory illnesses, very many of which become pneumonias and, without adequate medical care, have a high mortality; (2) Gastroenteritis—vomiting, diarrhea and dehydration; (3) Whooping Cough—a completely preventable illness, or nearly so at least. This is a very dreaded problem. It is not the Whooping Cough, of course, which kills, but the secondary complications; and (4) Rubeola Measles—kills directly by itself and also gets involved in secondary infection problems.

A very real concern complicating all of this, of course, is the state of nutrition. The average newborn child is fed for the first one to two years at the breast. The infants are usually quite well fed, in my opinion, and quite well nourished because breast milk represents an excellent source of most of the usual nutritional requirements. It is after the youngsters get off the breast, usually because the mother is again pregnant, that nutritional deficiencies begin to crop up.

In the latter stages of breast feeding, the child is introduced to the usual family fare, which includes tortillas (a cornmeal pancake which acts as the staple bread in the diet), frijoles (or beans), and thin coffee very highly sweetened with sugar. These three foods represent the mainstay of the diet of virtually all the rural population of Guatemala. They are supplemented by many of the local foodstuffs. But among the Indian populations, particularly in the poorer areas, those who grow these foodstuffs usually send them to market rather than eat them themselves. They feel that bringing more money to the family is preferable to the nutritional advantages derived from these substances.

IN SUMMARY, the major medical problems of the country revolve around, first of all, insufficient physicians in the rural areas, and, secondly, inadequate public health measures. Also, there is insufficient education of the general populace in matters of a broad education as well as matters of health care.

Finally, there is the insufficient application of modern methods of disease prevention, particularly in terms of such things as immunizations. Obviously, nutritional problems play a key part in all of this, as well as intestinal parasites, which, again, is a public health matter. ■



Huntsville-Cuilapa

Partners For Progress

By Dr. & Mrs. E. C. Mosley, Huntsville, Alabama*

THE SISTER CITY under the Partners of the Americas has functioned successfully for about six years, bringing about a better "people to people" relationship between American states and Latin American countries. The concept of this alliance was born under the Eisenhower administration, developed further by President Kennedy under the Alliance for Progress to its present format.

Alabama is joined with Guatemala in this alliance, and 12 Alabama cities have been paired with cities in Guatemala.

Alabama has enjoyed a delightful relationship with this country in the nature of both exchanges and aid. Exchanges have occured in such areas as high school students, symphony conductors, teachers, doctors and mayors. Aid has taken the form of technical information in water drainage, agriculture, cattle raising, medicine, education, etc., as requested by the Guatemalans.

A **GUATEMALAN** dance group, along with the Guatemala official marimba band, performed in Huntsville and other Partner Cities free of charge—a wonderful experience.

Outright donations have been made of fire trucks, ambulances, medical supplies and hospital equipment and school supplies. Even vegetable seeds were sent to our city of Cuilapa so the children could grow their own vegetables to be used for their lunches. Huntsville had already donated money to CARE to supply Cuilapa school children with free lunches for a year.



Mayor of Cuilapa (center) served as official host for Dr. and Mrs. Mosley during their stay.

In June of 1974, Dr. and Mrs. Everett C. Mosley and children and Dr. and Mrs. James Wall (he is a dentist) went to Guatemala for both pleasure and business. Drs. Mosley and Wall worked in Cuilapa mostly for general observance of medical problems. They also delivered a footlocker full of medicines and supplies to the new hospital there at the same time.

THE GIGANTIC TRAGEDY in Guatemala has had a tremendous impact on Alabamians. This beautiful country and its warm and friendly people will never be the same. In addition to the tremendous loss of life and human suffering lies the truth that the country has also lost much of its Spanish history. It will take years before this country can redevelop, at least to the same poverty level it had before the quake.

We have in the Huntsville area alone six dentists, an oral surgeon, two pediatricians, a surgeon, an anesthesiologist, and a plastic surgeon all ready to go to Guatemala at their own expense. Presently, Guatemala is still trying to assimilate the onslaught of doctors from all over the world who appeared immediately on the scene.

As the situation becomes more organized, the Guatemalan Red Cross and Disaster Relief Committee will contact the Alabama Red Cross to make known their needs for medical personnel. Then off we go. However, Guatemala's needs may take months and months to meet. ■



*Dr. Mosley is an anesthesiologist in Huntsville, Alabama. Mrs. Mosley is chairwoman for the Huntsville-Cuilapa Partner City Committee.

Alabama responds to a crisis...

By John W. Bloomer, Editor, The Birmingham News



SWIFTLY, effectively and with generosity of dramatic proportions, Alabama responded to the devastating tragedy which rocked the Central American republic of Guatemala in the early morning hours of February 4.

Alabama's reaction to one of the major earthquakes of the century in terms of killed, injured and property damage could have been no more responsive if Guatemala had been a neighboring American state.

Even before the full extent of the earthquake was known, within hours of the first report from Guatemala City, Alabama initiated programs to provide relief of every description to the nearby Latin American country.

Five weeks later, with the death toll at 22,084, 74,105 seriously injured and hundreds of thousands homeless, Alabama citizens continue vigorously their programs and efforts to assist in rehabilitation of the stricken country.

STIMULATED by the Alabama/Guatemala Partners of the Americas and working also through the Red Cross and the Salvation Army, Alabamians—on the day the earthquake struck—started contributing clothing, food, blankets, tents, and medicines for shipment to Guatemala. Thirty tons of such materials were moved from Alabama cities to New Orleans by Ross Neely Trucking Company.

The Alabama Civil Defense office offered two 200-bed field hospitals, and through coordination with the Alabama Partners were able to get the hospitals moved to Guatemala City by charter cargo plane paid for by the Organization of American States. The plane carrying the hospitals, consigned to the OAS and the Guatemala Partner organization, were met by Mrs. Kjell Lanqerud, wife of the President of Guatemala, and Dr. Julio Castillo, Guatemalan Minister of Health.

Offers of assistance from medical specialists, doctors and nurses started coming into Partner offices almost immediately and are still continuing. All were anxious to go to Guatemala to help with the thousands of injured in any way possible. Since no formal request had been received from the Guatemalan ministry of health, the Partner organization did not encourage volunteer travel to the devastated area. However, many medical personnel from Alabama, on their own, did go to Guatemala and offered their services.



Medical Society and Alabama Partners members pack life-giving supplies. From Left: Dr. John Akin, Pres., JCMS; Wallie Carpenter, Exec. Dir., JCMS; Robert Hornsby, Partners official; and Mrs. Diane Rogers, JCMS secretary.

THE JEFFERSON County Medical Society made one of the most valued contributions by collecting over two tons of hospital supplies, drugs and medicines. The greatly needed material was carried by the Alabama Air Guard to Charlotte where it was loaded to a charter cargo carrying two South Carolina field hospitals to Guatemala.

Wallie Carpenter, Executive Director of the Jefferson County Medical Society, directed that organization's relief effort. Carpenter is now engaged in looking for wheel chairs which can be sent to Guatemala for those left permanently crippled by the earthquake.

Other materials sent from Alabama to Guatemala included 144,000 disposable diapers and 48,000 baby bottles. Also, Louisiana rice growers donated 60 tons of rice to Guatemala in the name of the Alabama Partners.

Among organizations reporting cash contributions for Guatemalans' relief are the Alabama Partners, who have received $35,000 for use in home and school reconstruction. The Red Cross reported dontations of $33,000. CARE and other such agencies have received thousands of dollars in contributions from Alabamians. Churches throughout the State raised large amounts of funds channeled chiefly through denominational relief agencies. The Salvation Army was also active in receiving cash and materials for Guatemala.

So significant was Alabama's response to Guatemala's need that Daniel Parker, Director of the State Department's Agency for for International Development, made particular mention of Alabama in testifying before the Foreign Affairs Committee of the U.S. House of Representatives on needed aid for Guatemala. ■

Radio network that saves lives...

(The following is an address given by State Senator Robert Ellis, Birmingham, at the EMS Radio Network dedication ceremonies, February 26, 1976, at the State Capitol Building in Montgomery. The JOURNAL is grateful to the EMS Division, Alabama Department of Public Health, for permission to publish Senator Ellis' presentation.)

GOV. WALLACE recently gave the Emergency Medical Services (EMS) Division of the Alabama Department of Public Health a $400,000 revenue sharing grant to complete a state-wide EMS radio network in the Very High Frequency range. At the time the grant was made, only 40 per cent of the hospital emergency departments in Alabama had radio contact with ambulances and emergency vehicles providing service to these hospitals.

Now, the system is virtually complete. All public hospital emergency departments and privately operated non-profit hospitals, 120 of them, have a 2-frequency emergency medical service radio system. They may talk directly: with ambulances on the scene and during transportation; with paramedic rescue teams as they provide their lifesaving services in such cities as Birmingham, Montgomery and Mobile; with volunteer county and town rescue squad ambulance services; and with military assistance to safety and traffic (MAST) helicopters.

THIS CAPABILITY cuts time in the dispatching and coordinating of EMS at the scene of accidents, sickness or disaster. The system makes it possible for the emergency departments to talk directly with the Emergency Medical Technicians (EMT), to give to these EMTs specific instructions concerning patient care; to receive important information concerning the number of patients, types of injuries, and essential medical information concerning patients' vital signs. These radios link the departments with EMS providers in the field and constitute a feature that is known to save lives and reduce suffering.

When disaster strikes, such as the event of a tornado or a hurricane, commercial power and telephone communications are often disrupted. One of the most valuable uses the state-wide radio network may have is during such disasters. These hospital base stations have the capability of reaching out within and beyond their regions to communicate their plight and their needs and to summon and coordinate the required help. The radios function independently of commercial power sources during such times, and although we all pray that such a disaster will not befall us, we may be exceptionally fortunate someday in having the hospital disaster communications capabilities which we now enjoy through this EMS network.

Included in the grant were funds to purchase helicopter radio equipment to permit aircraft to talk with hospital emergency departments and with ambulance and other emergency vehicles on the ground, including law enforcement and public safety officers who are frequently first on the scene at accidents and disasters. This linkage facilitates landing and safety procedures, as well as the coordination of emergency medical with other public safety agencies.

In addition to communications equipment, the helicopters are also equipped with specialized portable incubators which work continuously on the ground or in the air to provide a stable, warm atmosphere necessary in the transportation of critically ill premature and newborn infants which sometimes require faster movement than can be afforded by ground vehicles.

FORTY RADIOS for ground ambulances, were also purchased under this grant, giving them direct 2-way contact with hospital emergency departments and others on the scene. This capability is a requirement of rules supporting Alabama Act 1590. There are channels in these radios to enable the ambulance services to acquire the radio capability of communicating directly with public safety officials.

We are grateful for this VHF network we dedicate here. We are assured that there are people alive and well today who might not be, were it not for this state-wide system and the dedicated people who serve to operate it. We hope that many others will be saved in this way and that the citizens of Alabama will benefit through better and more prompt emergency medical care. ■

EMS rescue equipment on display at State Capitol.





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Veiscocutaneous Conduit A Method of Permanent Urinary Diversion: Fifteen Year Follow-Up

A. Derrill Crowe, M.D.
Edward Van Zile Scott, M.D.*
Cash Stanley, M.D. **

In 1961, Dr. Edward Van Zile Scott described a method of permanent urinary diversion and reported its use in thirteen (13) patients, all with less than 18 months follow-up. In 1968, Dr. Scott and Dr. A. Derrill Crowe reported the use of a vesicocutaneous conduit in 65 patients, all with less than 8 years follow-up.

This paper reports the use of vesicocutaneous conduit in 85 patients and up to 15 years follow-up. In the interim, because of the 15 years experience, refinement of indications for a vesicocutaneous conduit as well as important details for the surgical procedure have been developed.

Description of Operation

The bladder is exposed by any suprapubic approach preferred by the surgeon. The vesicourethral junction is severed and the urethra *carefully* closed (Fig. 1 & Fig. 2). The bladder is then bivalved by an incision on each lateral aspect of the bladder, pulling the anterior flap cephalad until the anterior and posterior flaps are of equal size (Fig. 3, Fig. 4 & Fig. 5). Care should be exercised to avoid the ureteral orifices at the beginning of each of the lateral bladder incisions.

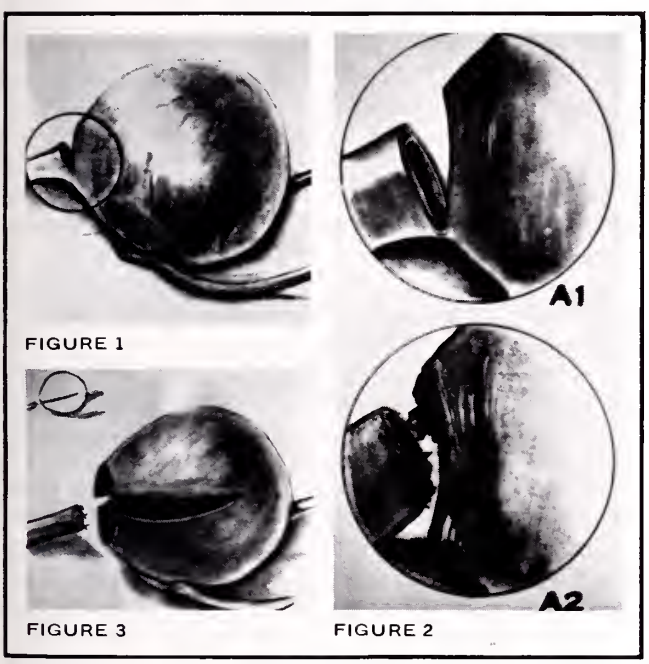
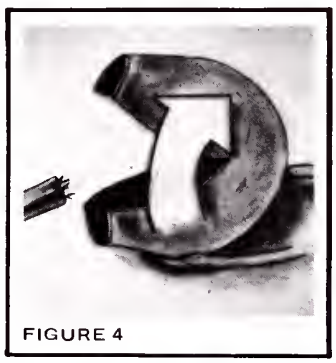


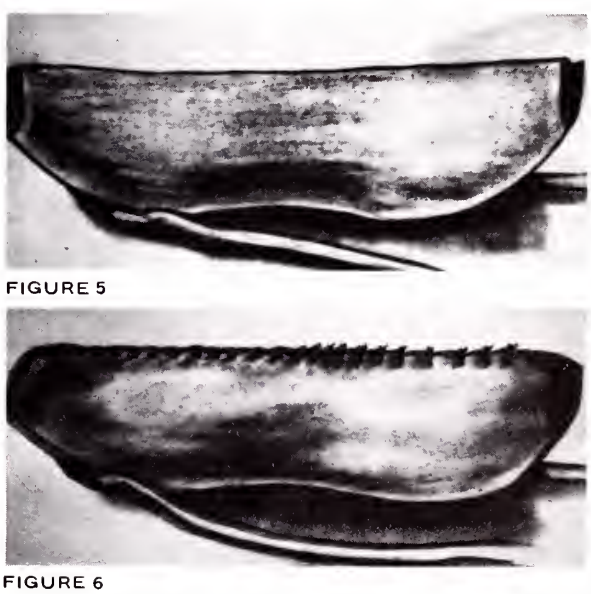
FIGURE 1
FIGURE 3
FIGURE 2


FIGURE 4

The lateral edges of the bivalved bladder flaps are then rolled medially and approximated using two layers of suture to form a long tube (Fig. 6 & Fig. 7). Careful closure of the lower end of the conduit must be carried out to prevent prolonged urinary drainage and to avoid injury to the lower ureters. The upper end of the tube is brought extra-periotoneally to the desired location of the stoma on the abdominar surface (usually the site of the excised umbilicus) (Fig. 8).

The circumferential incision to form the stoma site is modified by a wide V-flap of skin in the inferior portion of the stoma. This is sutured between the upper edges of the conduit. This modification is an attempt to prevent later stenosis of the stoma.

The location of the stoma in the initial 13 patients was in the lower abdomen. Due to severe kyphosis and/or scoliosis in many of the patients, the stoma was moved to the site of


FIGURE 5
FIGURE 6

*Urologists, Birmingham.
**Urologist, Macon, Georgia.



FIGURE 7

the excised umbilicus in order to obtain a relatively flat surface for application of the urinary collection devise.

It is suggested that one use ureteral catheters as stints to prevent prolonged urinary leakage from the lower end of the conduit and prevent transient ureteral obstruction due to edema that may cause azotemia and/or sepsis. The retropubic space is drained by any method preferred by the surgeon (Fig. 9).

Selection of Patients

During the past 15 years, 85 patients have had urinary diversion by a vesicocutaneous conduit. The primary disease process was spina bifida, 76; pilio, 2; epispadias with urinary incontinence, 3; muscular dystrophy, 1; spinal cord trauma, 1; cerebral palsy, 1; bilateral hydronephrosis, 1 (no longer used) (Fig. 10).



FIGURE 8

We have found obesity and severe body distortion such as severe kyphosis and scoliosis requiring special location of the stoma are more amenable to ureteroileal conduit as a diversionary method. After 15 years experience, we have found a vesicocutaneous conduit is more acceptable with fewer complications when limited to patients with normal upper urinary tracts.

FIGURE 9

IMPORTANT TECHNICAL DETAILS OF PROCEDURE

1. **Closure of Urethra**
2. **Careful watertight closure of lower half of conduit**
3. **V-Flap portion of skin in lower portion of stoma**
4. **Ureteral Catheter drainage for 4-7 days**
5. **Adequate drainage of conduit and retropubic space**

Age At Time of Surgery

The ages of the patients ranged from 9 months to 14 years in the 85 patients reported in this study (Fig. 11). The majority of the patients are diverted between the ages of 3 and 7 years. The children operated on prior to age 3 were diverted because of evidence of deteriorating upper urinary tracts and because of uncontrollable urinary infections. In the case of children with complete urinary incontinence, diversion is recommended prior to school age.

Advantages of Vesicocutaneous Conduit VS. Other Forms of Urinary Diversion

As with any type of urinary diversion, the completely incontinent patients are pleased with surgery. This is especially true of school-age children.

Urinary infections with sepsis are more easily contolled after vesicocutaneous conduit diversion, probably due to the small volume of residual urine in the conduit. The patients usually have a low grade pyuria and a positive urine culture from a catheterized urine specimen of the conduit, but they have no clinical evidence of infection.

The vesicocutaneous conduit procedure is shorter in operating time than a ureteroileal conduit. There is no ureteral manipulation, thereby decreasing the risk of ureteral obstruction.

The peritoneal cavity is not entered during the procedure, thereby decreasing the risk of ensuing intestinal complications such as leaking intestinal anastomosis, peritonitis, adhesions and intestinal obstruction.

Complications of Vesicocutaneous Conduit

The years of follow-up have ranged from 1 to 15 years, revealing some late complications and greatly increasing experience with this surgical procedure. (Fig. 12).

The most common immediately post-operative complications are: 1) Prolonged suprapubic drainage of urine due to inadequate closure of the lower half of the conduit; 2) Transient ureteral obstruction due to edema and/or angulation of lower ureters causing azotemia and/or sepsis; 3) Sepsis without ureteral obstruction. The first two of these early complications are avoided with use of ureteral catheters for 5-7 days following surgery.

The most frequent late complication has been stoma problems (41 pts.) which seems to be true of all forms of cutaneous urinary diversion (Fig. 13). Twenty-four patients had to have one or more stoma revisions and another 17 had mild problems that responded to local treatment. Four patients had to have a nephrectomy because of chronic pyelonephritis, sepsis, stones and/or hydronephrosis. Another 6 developed renal calculi, requiring surgery. Two patients had obstruction of ureters at the uretero-vesical junction, requiring ureteral reimplantation into the conduit.

We now convert these patients to ureteroileal conduit. Six developed calculi in the vesicocutaneous conduit, necessitating removal. Two patients developed vesicovaginal fistula, requiring closure at a later date. The etiology of the fistulae was injury of the vagina at the time of construction of the vesicocutaneous conduit.

Seventeen patients had normal intravenous pyelograms that deteriorated after surgery (Fig. 14) and 6 patients had

FIGURE 10

INDICATIONS FOR VESICOCUTANEOUS CONDUIT

1.	Spina Bifida	76
2.	Epispadias With Incontinence	3
3.	Polio	2
4.	Cerebral Palsy	1
5.	Spinal Cord Trauma	1
6.	Muscular Dystrophy	1
7.	Hydronephrosis (no longer used)	1
	Total	85

abnormal intravenous pyelograms with further deterioration after surgery, for a total of 23 patients who developed deterioration of the upper urinary tracts after construction of a vesicocutaneous conduit. Conversely, 8 patients had abnormal intravenous pyelograms that improved after surgery. Many of these 17 patients with normal X-rays that deteriorated after surgery did not reveal changes until several years after surgery. We feel that periodic follow-up intravenous pyelograms are mandatory (Fig. 14).

In the series of 85 patients, 13 were converted to ureteroileal conduits (Fig. 15). Seven of these were due to severe problems with the stoma. Four children developed renal calculi with some degree of hydronephrosis and were converted to ileal conduits. Two children were converted because of progressive hydronephrosis without calculi.

FIGURE 11

AGE AT TIME OF DIVERSION

AGE	No. of Patients	AGE	No. of Patients
1	5	8	6
2	7	9	5
3	12	10	4
4	10	11	2
5	11	12	3
6	9	13	0
7	9	14	2
Total	85		

Deaths

There have been 5 deaths in the series of 85 patients (Fig. 16). Two were due to overwhelming sepsis with hydronephrosis. In retrospect, the patients were not candidates for a vesicocutaneous conduit because of the presence of hydronephrosis prior to construction of a vesicocutaneous conduit. One patient died of complications of muscular dystrophy and another died in the immediate post-operative period of aspiration pneumonitis. The fifth patient died of complications of influenza.

FIGURE 12

LENGTH (YEARS) OF FOLLOW-UP

Years	No. of Patients	Years	No. of Patients
1	3	8	9
2	10	9	15
3	10	10	8
4	4	11	4
5	8	12	2
6	3	13	3
7	3	14	3
TOTAL — 85			

FIGURE 13

COMPLICATIONS OF VESICOCUTANEOUS CONDUIT

	Complications of VCC	Number of Patients
1.	Stoma and/or Bag Problems	41
	Mild—Responded to local treatment	17
	Severe—Requiring 1 or more stoma revisions or conversion to ileal conduit	24
2.	Calculi in VCC requiring removal	6
3.	Developed renal calculi	6
4.	Nephrectomy due to calculi and infection	4
5.	Ureteral obstruction requiring reimplantation into VCC	2
6.	Vesico-vaginal fistula requiring closure	2
7.	Bilateral hydronephrosis requiring bilateral nephrostomies	1

Contraindications

The contraindications for vesicocutaneous conduits have been greatly expanded since the inception in 1960 of the procedure (Fig. 17). We now believe any upper urinary tract changes, especially hydroreteronephrosis, is the most significant contraindication. Although many dilated ureters improved after construction of a vesicocutaneous conduit, as in other firms of diversion, they are prone to develop chronic urinary infection and calculi.

Patients with spastic or contracted bladders are poor candidates because the length of the constructed tube is not long enough to place the stoma in a proper location.

FIGURE 14

FOLLOW-UP INTRAVENOUS PYELOGRAMS 83 PATIENTS HAD FOLLOW-UP IVP

1.	Patients with normal preop IVP	65
2.	Patients with normal preop and normal postop IVP	48
3.	Patients with normal preop IVP that deteriorated	17
4.	Patients with abnormal preop IVP	18
5.	Patients with abnormal preop IVP that improved	8
6.	Patients with abnormal preop IVP deteriorated further	6
7.	Patients with abnormal preop IVP that remained unchanged	4

Lately we have been seeing cases of spina bifida with severe scoliosis and/or kyphosis. The stoma site has to be so high on the abdominal wall in order to locate a flat surface to which the bag will adhere, that the vesicocutaneous conduit tube is not long enough even with a dilated bladder.

One patient with spastic paraplegia apparently had the exposed bladder as a triggering mechanism for the spasticity of the lower extremities. This patient had to be converted to an ileal conduit.

Conclusions

Many patients with need for a procedure resulting in urinary diversion are acceptable candidates for a vesicocutaneous conduit. The procedure is short in time and carries fewer major complications than bowel urinary

FIGURE 15

REASONS FOR CONVERSION TO URETEROILEAL CONDUIT

1.	Stomal Problems	7
2.	Hydronephrosis with Urinary Infections	2
3.	Hydronephrosis with calculi Renal	4
	TOTAL	13

diversion. Although the stoma can be placed in many locations on the abdominal wall, it does not have the diversity of location for the stoma of the ileal conduit.

FIGURE 16

DEATHS

1.	Severe Urinary Infection with Sepsis	2
2.	Influenza with Complications	1
3.	Vomitus Aspiration	1
4.	Complication of Muscular Dystrophy	1
	TOTAL	5

The number of patients we feel are candidates for urinary diversion has decreased because of the proven acceptability of intermittent catheterization. However, we continue to divert patients with complete urinary incontinence and uncontrollable bladder infection.

FIGURE 17

CONTRAINDICATIONS FOR VESICOCUTANEOUS CONDUIT

(1) Hydroureteronephrosis; (2) Spastic Bladder; (3) Contracted Bladder; (4) Obesity; (5) Severe and unusual kyphosis and/or scoliosis causing stomal placement difficulty.

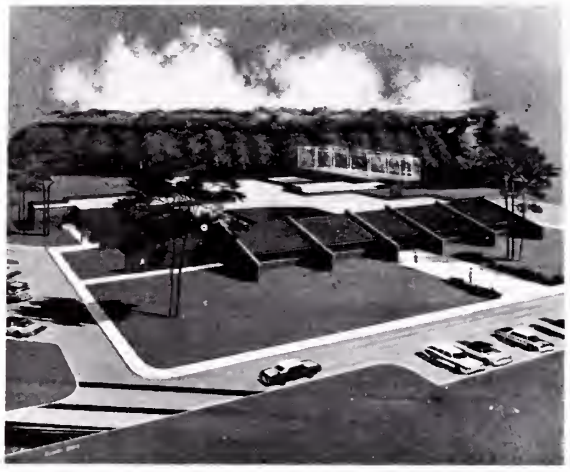
After 15 years of follow-up, we feel that the vesicocutaneous conduit is a good method of urinary diversion in select patients. ■

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Improved Technique For Lumbar Epidural Anesthesia

Hamdi A. Erdemir, M.D., Malcolm D. Middleton, M.D., and Guenter Corssen, M.D.*

Abstract

A technique, basically loss of resistance[1] is further modified to prevent dural punctures, especially those due to jammed syringes. If a lidocaine filled syringe feels rigid it indicates either "needle tip in ligamentum flavum" or "syringe jammed" (adhesion or grit between piston and barrel). Air in the lidocaine allows instant recognition of the (completely rigid) jammed syringe.

Method

Proper preanesthetic interview and sedation increase patient cooperation and decrease flinching. Propaganda is useful. In the operating room the conscious patient lies on his side with an intravenous line, EKG and BP monitoring by an assistant. The table is flat, the patient is tightly flexed and the anesthetist sits to perform a rigidly standardized sterile technique. Usually disposable epidural kits are used.

Step 1: Midline skin wheal via 25 G needle nearer to L_3 than to L_2.

Step 2: Insert Crawford or Tuohy 18 G needle through the wheal - initial puncture with a sharp needle.

Step 3: Advance the epidural needle in the sagittal plane at 75 degree angle to the skin (15 degree cephalad), through the supraspinous and interspinous ligaments, onto the ligamentum flavum. This depth is 1 1/4" in a thin adult. The supraspinous and the flavum are recognizably tough. Penetrate the flavum 1 mm.

Step 4: Turn the bevel of a Crawford needle caudad and that of a Tuohy cephalad. Remove the obturator and connect a smooth fitting 5 cc. all glass syringe containing 3 cc. 1% lidocaine and a bubble of air, 0.2 - 0.4 cc.

The lidocaine must be free of bacteriostatic chemicals and at room temperature.

Step 5: Grip the needle shaft near the skin with two fingers and thumb of the left hand and rest the hypothenar border on the patient. Grip the piston of the syringe lightly between index finger and thumb of right hand, resting the long finger tip on the rim of the barrel. Push the piston with the right thumb. There will be no inflow of lidocaine due to the density of the ligament, but the piston will move slightly to and fro with variations in thumb pressure. This is due to the compressibility of the air bubble and rules out "jammed syringe." If the syringe is jammed, of course it is changed.

Step 6: Continue to push with the right thumb relaxing the grip of the left hand slightly so that the needle advances slowly through the ligamentum flavum. As soon as loss of resistance to lidocaine inflow occurs, indicating entry into the epidural space, tighten the left hand grip on the needle. The patient generally flinches as the cold lidocaine enters the epidural space.

Step 7: Detach the syringe and watch for CSF or blood efflux, rotating the needle through 4 quadrants (to detect dural flap). Some lidocaine may drip out but that is cold, minimal in amount and free of glucose. If dura has been punctured change to another interspace or perform spinal anesthesia.

Step 8: To completely rule out dural puncture inject the remainder of the 3 cc 1% lidocaine and observe absence of spinal anesthesia within two minutes. One percent lidocaine is hypobaric to CSF so the table should be slightly head down.[3]

Step 9: Dural puncture being totally ruled out, now single dose epidural anesthesia may be confidently induced, or a catheter inserted.

Choice of agent, concentration and local vasoconstrictor is by current pharmacology and degree of block needed. Volume of injection is according to age and segmental level requirement.[4]

Results

Incidence of inadvertent dural puncture in this teaching hospital has been related most closely to the experience of the performer, with beginners incidence being up to 20%. The authors own incidences have been 1%. Two cases of unrecognized dural puncture occurred before the "bubble" was introduced, and none since.

Discussion

The incidence of inadvertent dural puncture has been reported as 0.5 - 3%, and in geriatrics 4%.[1] Avoidance of dural puncture is often difficult in geriatrics because bony spurs on spinal processes and narrowing of the interlaminar foramen decrease the choice of angle of attack. If the angle of attack imposed by the anatomy is 90 degree, then the needle will intersect the epidural space in its narrowest diameter. This fact, together with the decreased predictability of dose requirement in epidurals for the very old[4], and the reduced incidence of spinal headache, leads us to favor spinal anesthesia for geriatrics. Similar considerations apply to severely atherosclerotic patients, at least for single dose epidural anesthesia, because their dose requirement may turn out to be that of a patient 25-50 years older.[5]

Dural puncture is reported to be due to the needle in 75% of the cases and to the epidural catheter in 25%.[2] Entry of the catheter into CSF or an epidural vein in potentially more hazardous because less likely to be recognized by aspiration, and a test dose should be given before every repetition of a continuous epidural analgesic. It has been suggested that before inserting the catheter a full first dose of anesthetic solution should be given through the needle, to distend and vasoconstrict the epidural tissues. We do not favor this technique because hypotension may occur while the operator is busy inserting the catheter.

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Anomalies Of Branchial Cleft Origin

Lawrence S. Fox, M.D., and Kenneth T. Miller, M.D.*

Anomalies of branchial cleft origin are usually encountered in children and young adults. They occur laterally in the neck along the anterior border of the sternocleidomastoid muscle. This report describes the clinical picture and the management of 33 patients with branchial cleft anomalies treated at the University of Alabama Hospital and the Children's Hospital during the past 10 years.

Embryology Of The Branchial Region

During the fourth week of embryonic life, four pairs of pharyngeal pouches appear in the proliferating mesenchyme of the lateral walls of the pharyngeal gut.[1] Simultaneously, four corresponding ectodermal grooves called branchial clefts appear on the surface of the embryo. The mesoderm surrounding the pharyngeal gut is thus divided into five branchial arches. Although the clefts and arches are in close proximity, they rarely communicate as open gill slits. The arches coalesce during the development of the embryo, and the branchial clefts are obliterated. Only the first cleft contributes to the definitive structure of the embryo. Part of its base remains open to form the external auditory canal.

Occasionally, additional remnants are present. If the first cleft remained completely open, the resulting defect would extend from the external auditory canal, around the angle of the mandible, to the midpoint of the horizontal ramus of the mandible. The second cleft would extend from the posterior tonsillar pillar, along the anterior border of the sternocleidomastoid muscle, to the lower third of that muscle.[2] Remnants of these clefts may occur anywhere along their courses. Remnants of the second branchial cleft are more common than those of the first cleft.

Material And Methods

A review of the records of the University of Alabama Hospital and the Children's Hospital from January 1, 1965 to December 31, 1974 identified 33 patients with branchial cleft anomalies. There were 19 from the Children's Hospital and 14 from the University Hospital. The majority of the patients were seen between the first month and the fourth year of life, but ages ranged to 60 years. Seventy-nine per cent of these patients were white. Sex distribution was nearly equal. (See Table I)

Right-sided branchial cleft anomalies predominated and bilateral remnants were recognized in only one patient. Seventy-nine per cent of the remnants originated from the second branchial cleft while 21% were of first cleft origin. A mass was the presenting symptom in 76% of the patients. Twenty-four per cent had a fistula alone and 10% had both. Infection was present in 27% of the patients. (See Table 2)

Table 1.
AGE, RACE, AND SEX DISTRIBUTION OF 33 PATIENTS WITH BRANCHIAL CLEFT ANOMALIES, 1965 - 1974

AGE	No. of Patients	AGE	No. of Patients
≤ 1 Mo.	2	11 yrs. - 20 yrs.	5
1 mo. - 1 yr.	7	21 yrs. - 30 yrs.	0
1 yr. - 4 yrs.	8	31 yrs. - 40 yrs.	3
5 yrs. 10 yrs.	4	41 yrs. - 50 yrs.	2
		≥ 60 yrs.	2
RACE		**SEX**	
White	26	Female	17
Black	7	Male	16

Table 2.
CHARACTERISTICS OF BRANCHIAL CLEFT ANOMALIES IN 33 PATIENTS, 1965 - 1974

SIDE OF ORIGIN:					
	Right	19	Left	13	Bilateral 1
CLEFT OF ORIGIN:					
	First	7	Second	26	Both 0
PRESENTATION:					
	Mass	15	Fistula	8	Both 10
INFECTION:					
	Present	9	Absent	24	

Results

The majority (91%) of patients at our institution were treated with total excision. Two of these patients had prior incision and drainage 4 years earlier. Three patients did not undergo surgery. Only one patient experienced recurrence after surgical excision; however, both patients who underwent incision and drainage developed recurrence and required definitive excision. (See Table 3)

Discussion

Sinuses and fistulae are said to be more common than cysts in this region.[3] Our experience was somewhat unusual in this regard. The diagnosis of a second branchial cleft remnant is usually made when a small opening is noted along the anterior border of the sternocleidomastoid muscle. They may be bilateral and often will exude small drops of secretion which may contain cholesterol crystals. The remnant may extend just beneath the skin or into the tonsillar fossa, and a cyst may form anywhere along its course. A first branchial cleft anomaly is suspected when a sinus or mass is observed beneath the mandible or in the preauricular area. The differential diagnosis includes salivary gland tumors, carotid body tumors, neurofibromas and abnormal lymph nodes. The most common complication is infection which usually occurs in remnants without external openings.

*Department of Surgery, Medical Center, University of Alabama in Birmingham.

Table 3.
RESULTS OF TREATMENT OF 33 PATIENTS WITH BRANCHIAL CLEFT ANOMALIES, 1965 - 1974

TREATMENT	NO. of Patients	RESULTS
No Surgery	3	
Incision—Drainage	2	Both recurred, cured by later excision
Total Excision	30	2 recurrences in 1 Patient

The treatment of choice for branchial cleft remnants is surgical excision. Sclerosing agents have been used with very unsatisfactory results. Short remnants may be excised through a transverse elliptical incision after introducing a probe into the tract. Longer tracts may necessitate parallel or "stepladder" incisions and the patient or patients should be informed of this possibility before operation. Complete sinuses of second branchial cleft origin will course through the carotid bifurcation and above the hypoglossal nerve to enter the tonsillar fossa.

There is minimal danger to the nerve and vessels if the dissection follows the tract closely.[4] Complete sinuses of first branchial cleft origin have a close but variable relationship to the parotid gland and facial nerve. The tract will always be superficial to the posterior belly of the digastric muscle.[5] The posterior extent of these tracts is often surrounded by cartilage contiguous with the external auditory canal.

The tract and any surrounding cartilage should be removed, carefully serving its junction with the external auditory canal. When the diagnosis is made in the presence of infection, adequate drainage and antibiotic therapy are indicated. Definitive excision should be delayed until the inflammatory response has completely resolved.

Summary

Branchial cleft remnants occur in the lateral neck anterior to the sternocleidomastoid muscle and in the pre-auricular area. The treatment of choice is complete excision. Our experience during the last 10 years at the University of Alabama Hospitals is presented. Recurrence following excision occured in one of our 33 patients. Patients initially treated with incision and drainage should undergo definitive excision at a later date.

Reprint Requests: Lawrence S. Fox, M.D., Department of Surgery, University Station, Birmingham, Alabama 35294

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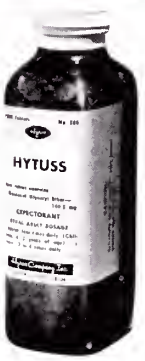


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Hypertension Control: Where Do We Stand In Alabama?

John R. Burk, M.D.*

How does an epidemiologist get involved with the problem of hypertension? Simply because hypertension is an epidemic in America. Dorland's *Medical Dictionary* defines epidemic as "...the extensive prevalence of any particular disease." If one expands the time frame of the usual epidemic and thinks in terms of generations, the recognized morbidity and mortality associated with hypertension quickly assumes the role of the contemporary American epidemic.

Approximately half (46%) of the deaths in Alabama in 1974 were attributable to cerebrovascular and heart diseases according to provisional data from the Bureau of Vital Statistics, Alabama Department of Public Health. In other words, one Alabamian dies every 33 minutes of causes related to cerebrovascular or heart diseases and some unknown fraction of these deaths are preventable. Alabamians share equally in the national mortality from hypertension. In fact, according to 1960 data on national and state mortality, Alabama is the 5th leading state with hypertensive heart disease mortality, with a rate of 49.6 deaths per 100,000, and 2nd leading state with chronic nephritis mortality, 10.4 death per 100,000.

NOT ONLY is hypertension mortality important, but hypertension morbidity carries significant personal, social and economic impact.

The magnitude of the problem is difficult to assess, and our data are incomplete. However, approximately 1/3 to 1/2 million Alabamians have hypertension, and this may be an underestimate. Of 3,720 Montgomery citizens participating in a shopping center screening project in 1973 initiated by Ciba Pharmaceutical Company, 22.1% (822) were referred to their physician for an elevation of their blood pressure.

Project HELP, which will be further discussed shortly, screened 15,949 residents of East-Central-Alabama and found 27% (4,262) with blood pressure above normal.

MORE RECENTLY, of 5,813 Chamber County residents screened and rescreened one week later, 24% (1,411) had a sustained elevation of blood pressure ($\geq$160/95).

Thus, having defined a problem of epidemic proportion one is faced with the challenge of controlling it. Just as infectious diseases, such as tuberculosis and typhoid fever, were the leading cause of mortality in generations past, control was obtained through the application of preventive and therapeutic measures. Hypertensive morbidity and mortality stand ready to be overcome by these same measures. Indeed the sequelae of hypertension can be thought of as a preventable disease awaiting our attention.

How is the problem being met in Alabama, where limited financial and health professional resources exist? According to 1970 U. S. Census Data, our per capita income is $3,420 compared with $4,492 nationally; only two states rank lower in the U. S. The physician-to-population ratio is 90 to 100,000, while the U. S. ratio is 174 to 100,000 or nearly twice that of Alabama. The ratios of nurse-and dentist-to-population is equally as bad. Given a shortage of health professionals the problems are compounded by the maldistribution of health personnel with concentrations in the urban areas. Maximum utilization of our limited resources is essential in overcoming hypertension. To better define the available resources, the Alabama Coordinating and Advisory Council held its first meeting one year ago.

THE OBJECTIVES of the council were to offer advice and coordination for all programs being conducted in the state. Such advice and coordination were given on request and were not binding. Secondly, the council served as a forum for interested individuals and experts in hypertension in Alabama.

The genesis of the council lay with Dr. Margaret Klapper whose discussions with the Bureau of Preventable Diseases, Alabama Department of Public Health, led to the development of a project grant funded by the Alabama Regional Medical Program (ARMP).

The council is made up of 25 representatives of 22 organizations listed in Table 1, voluntarily participating to achieve their mutual objectives. The current Executive Committee and their addresses are shown in Table 2. Five meetings have been held and were open to interested groups and individuals. Council work has been divided among 5 subcommittees and the staff, who have undertaken a broad front of activities. These subcommittees are (1) lay educational resources, (2) professional educational resources, (3) hypertension program activities, (4) proposals, comments, and coordination, and (5) development of local councils. To date, attendance and participation in the council have been excellent.

THE BUILDING blocks for hypertension control have been present and developing in the state for years. The Alabama Heart Association is the **largest** voluntary health agency concerned with problems of heart disease and the risk factors which contribute to its development. Since 1974, they have screened approximately 47,000 Alabamians and found 22% with blood pressures greater than 160/90.

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*Presented at "Hypertension in the Deep South—An Action Model," Oct. 23-24, 1975, Birmingham. Dr. Burk is currently an American Lung Assoc. Fellow in Pulmonary Disease, Cardiopulmonary Division, Dept. of Internal Medicine, Southwestern Medical School, Univ. of Texas Health Science Center, Dallas, Texas. He was formerly Epidemic Intelligence Service Officer, U.S.P.H.S., located at the Alabama Dept. of Public Health, Montgomery.

TABLE I

MEMBER ORGANIZATIONS

Alabama Chapter, American Academy of Family Practice; Alabama Comprehensive Health Planning Agency; Alabama Department of Labor; Alabama Division, American Red Cross; Alabama Heart Association; Alabama Hospital Association; Alabama Nursing Home Association; Alabama Pharmaceutical Association; Alabama Regional Medical Program; Alabama State Nurses Association; Auburn Cooperative Extension Service; Auburn School of Pharmacy; County Health Officers Association; National Association For The Advancement Of Colored People; State Committee Of Public Health; State Health Department; Tuskegee Area Health Education Center; Univ. Of Ala. In Birmingham School of Community & Allied Health Resources; University of Alabama School of Medicine In Birmingham; University of South Alabama School of Medicine; Veterans Administration.

Of even greater importance is the active role the Alabama Heart Association has taken in public and professional education in hypertension control, distributing thousands of pieces of literature to the public and providing continuing education, utilizing closed circuit TV and scientific sessions, to health professionals.

The flexibility of the Heart Association in meeting financial and personnel needs through its publicly supported campaign fund and volunteer staff should be necessary to the success of any control program.

The University of Alabama Medical Center (UAB) has long been involved in programs of clinical and educational research and service in hypertension control. The Heart Evaluation Clinic under the direction of Dr. Harold Schnaper and Dr. Albert Oberman is participating in the evaluation of standardized treatment protocols. The Hypertension Detection and Follow-up Program addresses itself "...to assessing the ability of a program of high blood pressure therapy and management to reduce the risks associated with high blood pressure in the general population," and "...to assessing our ability to influence life expectancy in the total population screened."

CURRENTLY, 750 Birmingham residents with elevated blood pressure in the home and in the clinic are participating in the Heart Evaluation Clinic along with 13 other national centers to evaluate the above problems. With the Veterans Administration cooperative study, a large number of men and women have been screened and are entering a standardized treatment program. Preliminary national data suggest that one in six men have blood pressure high enough to need treatment.

TABLE II

EXECUTIVE COMMITTEE

GEORGE W. NEWBURN, Jr., M.D. (Chairman), Health Officer, representing University of South Alabama School of Medicine, Mobile.

HUGH PRATT, M.D. (Chairman-Elect), Medical Advisor, Project HELP, Birmingham.

ANN FULLER, R. N. (Secretary), Representing Alabama State Nurses Association, Montgomery.

G. C. LONG, Executive Vice-President, Alabama Hospital Association, Montgomery.

JOSEPH L. OWINGS, Board Member, Alabama Pharmaceutical Association, Birmingham.

Additionally, the NIH-VA Cooperative 8 Programs are studying the effect of treatment of mild hypertension in relatively young individuals; 400 Birmingham veterans are participating in this study.

A most important and unique state-wide program has been carried out by project HELP, Health Extension Learning Program, created through the cooperative efforts of UAB, Auburn University Extension Service, and the Alabama Department of Public Health. The medical expertise of UAB and the network of over 1,000 full-time extension workers in all Alabama counties have combined to promote public awareness through lay educational programs and detection and referral projects. To date, 230 volunteers have completed a certificate course dealing with the accurate determination of blood pressure. The potential for project HELP is great, and it could be instrumental in developing control programs, particularly in rural areas of Alabama. Auburn University has further provided unique audiovisual educational materials through its educational television department.

THE AUBURN School of Pharmacy has worked under the auspices of the ARMP to provide hypertension detection to the surrounding communities through its pharmacy students. At the same time the potentially expanded role of the pharmacist as a member of the hypertensive control team has been explored. Certainly it is appropriate for the patient's pharmacist to seek information on possible side effects from medication and to assist in avoiding problems of drug interaction, as well as to provide a convenient site for checking blood pressure of ambulatory patients. The Alabama Pharmaceutical Association has sponsored several seminars on hypertension as well as carried educational articles in its Journal.

The Alabama Department of Public Health serves all Alabamians through its 67 county health departments. In addition, to sponsoring the Alabama Advisory and Coordinating Council, the Bureau of Preventable Diseases under the direction of Dr. Frederick S. Wolf has undertaken projects in continuing professional education and developing a model clinic in Chambers County for hypertension detection and control through ARMP grants.

The Bureau of Preventable Diseases in cooperation with the Medical Association of the State of Alabama (MASA), the University of South Alabama, and the Regional Medical Foundation in Montgomery has sponsored four continuing education seminars for approximately 145 participating physicians.

ALL COUNTY Public Health nurses have participated through the state in-service education program in workshops conducted by two specially trained nurses. Pre- and post-testing of participants revealed a 28% median improvement. Additionally, a speaker at the annual Alabama Nurses Association dealt with hypertension and the nurses role as the primary care giver.

The Tusekegee Area Health Education Center, TAHEC, is a consortium of organizations serving the "black belt" of central Alabama. During the past May, National High Blood Pressure month, over 3,000 Alabamians living in 5 of the

counties were screened for hypertension. Area wide TV spots furthered public awareness. TAHEC has worked to identify resources in its geographic area and has documented need for hypertension control programs. Results of their work are to be published.

This review of ongoing activities was not meant to be complete. Equally important developing programs in other parts of the state, such as Decatur, Gadsden, Anniston, Tuscaloosa, Huntsville and Mobile, have not been mentioned for lack of time. A beginning has been made and we have many of the building blocks for a successful statewide hypertension control program. The magnitude of the problem has been documented and many resources identified. Models for education, detection, and treatment programs are being developed. Public and professional awareness of this American epidemic is increasing, and the solution will be found.

BUT HOW are we to pay for a control program? Though I have no Alabama data, there is national evidence of the cost-benefit of effective hypertensive control. There is no one answer (ARMP cannot pay for it all). An estimated 68,000 hypertensive Alabamians have incomes below the poverty line and thus may have increased difficulty in obtaining and paying for conventional private medical care. The range is from over 9,000 in Jefferson County to 230 in Coosa County.

Federal, state, and local resources must be made available to meet the need. The past points to the effectiveness of our county public health departments in meeting specific challenges when they are adequately equipped. Combined with new models of health care delivery and adequate resources, our present county health departments could undertake a substantial portion of the work in hypertension control.

The Chambers County model clinic suggests in **preliminary** results that the annual cost for screening, diagnosis, and follow-up, with medication for the new hypertensive patient is $175 per patient per year. This includes history, physical exam, computerized EKG and basic blood and urine work. Such an approach maximizes the role of the non-physician health care professionals on the hypertension control team. The physician's role is that of monitor and problem solver, not director or primary care deliver.

SEVERAL outstanding problems are known, besides financial and health personnel limitations. Awareness of the problem of hypertension is not uniform in all of our communities, either public or professional.

An unknown proportion of the estimated hypertension population may already be receiving adequate care through private practitioners. We do not have good data telling us to what extent the private practitioner has already become involved in hypertension control, or what his desire to do so in the future is, particularly at a price the public can afford.

The "best" hypertension control program has yet to evolve in Alabama and will probably vary from community to community. But surely it will depend on financial support from both public and private sources, and personnel support from all willing participants, volunteers, physicians, physicians assistants, nurses, nutritionists, pharmacists, administrators, representatives of labor and industry and physicians.

MUCH OF the educational material to bring about public awareness is available, but remains to be utilized. The solution to the challenge of patient compliance with a lifetime of treatment remains for the educators and psychologists to develop.

Thus, we in Alabama have begun down a long path, towards prevention, detection and control of hypertension. Let us make this conference one step along the way.

Acknowledgments

Grateful acknowledgment is made to Richard G. Adams, M.P.H., Director of Division of Hypertension Control, Bureau of Preventable Diseases, Alabama Department of Public Health. Sparky's diligence and determination in data collection and analysis make possible this presentation. ■

Request reprints to Division of Hypertension Control, Bureau of Preventable Diseases, State Office Building, Room 250, Montgomery, Alabama 36104.

FP CERTIFICATION EXAM NOTICE

The American Board of Family Practice announces the next certification examination will be given October 30-31, 1976. The two day written examination will be held in seven cities geographically distributed throughout the United States.

Information regarding the examination may be obtained by writing: Nicholas J. Pisacano, M.D., Executive Director and Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Lexington, Kentucky 40506.

Please Note: It is necessary for each physician desiring to take the examination to file a completed application with the Board office. Deadline for receipt of applications in this office is June 15, 1976. ■

APPLY ANYTIME FOR PRA

Physicians may now apply for the AMA Physician's Recognition Award at any time, rather than on a three-year cycle. In the past six years, 64,149 physicians have qualified for the continuing medical education award. Beginning this year, AMA members will pay no application fee toward the award. Non-members will be charged $25. ■

IMPACT FEATURE ANNOUNCED

Beginning with the February 23 issue of the *American Medical News*, the AMA has launched a new section, *Impact*. The section will appear in the fourth issues of *AM News* each month, and it will focus on the socioeconomic aspects of medicine. The AMA hopes that it will serve to clarify and interpret the many complex topics and events that are reported in the regular news columns of the paper.

A newspaper normally confines itself to reporting what happens; *Impact* will endeavor to concentrate on the why of major medical issues. Primary objective is to provide AMA members with an even more comprehensive, yet economical, editorial package than *AM News* has previously offered. Physician response and comments are urged by *AM News* editors. ■

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***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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Usage in Children. Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

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ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

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DEAN'S REPORT:

Primary, Secondary, and Tertiary Medical Care



James A. Pittman, Jr., M.D., Executive Dean, University of Alabama School of Medicine

THE people of Alabama need primary, secondary, and tertiary medical care available in the State. What do these terms mean? They sometimes mean different things to different people; and many locations provide various mixtures of all three phases of medical care. The following is offered as an attempt at clarification.

PRIMARY CARE: This is *first contact* care. It provides *access* to the system when the patient is sick and "just needs a doctor" (or perhaps some other health advisor). It is *continuous*, *comprehensive*, and *personalized* care. It is a response to the discontinous, highly fragmented, largely impersonal care often found in large complex medical centers today. The United States public wants a primary medical care system like a McDonald's Hamburger chain for the family rather than a Boeing Aircraft Factory, since they can't even find their way around the latter.

The primary care physician provides personal, continous, comprehensive care to the patient, but he does not carry out every medical function personally. Rather, he acts as the manager of the patient, calling for consultations by subspecialists when necessary, referring his patient for neurosurgery, congenital heart surgery, or other tertiary care as needed, all the while providing the continuity of care and personal contact so desired by the patient. Primary care is also mainly *vertical;* it is *ambulatory* care, but is obviously also much more than just seeing patients in an office setting.[1,2]

SECONDARY CARE: This is *basic hospital services, bed care* in a facility which can provide for the basic diagnostic workup, routine laboratory services, administration of frequently used medications, provision of services for normal obstetrical cases, uncomplicated surgery, etc. It is *episodic.* The lines between secondary and primary care on the one hand and, especially, between secondary and tertiary care on the other are fuzzy and subject to continual changes.

TERTIARY CARE: This is *specialist* and *subspecialist* care. It is *high technology* care. It is the electron microscopic diagnosis of renal biopsy specimens, EMI or other computerized axial tomography imaging of lesions, computerized lung studies in nuclear medicine laboratories, invasive cardiovascular studies such as coronary angiography, renal transplants, oncology therapy on the fringe of research, congenital heart surgery, and the like.

One important aspect of tertiary care is that it often deals with entities of relatively low incidence in the general population, so that centralization is necessary for a sufficient case load to maintain the technical proficiency of the staff.

Another important aspect is the economic forcing of shared facilities, such as the EMI scanner or the linear accelerator, which are simply too expensive for each small community hospital to obtain and maintain. Even for such a relatively common disorder as hyperthyroidism, it has been stated that a major factor in the primary physician's choice of surgery is the availability of "an expert surgeon with wide experience and *continuing practice* in thyroid surgery (at least three thyroid operations per month)."[3] That statement was written by an official of the Federal government,* and we can expect more of that sort of definition in the future.

The United States Veterans Administration system of hospitals had data several years ago documenting the not-too-surprising fact that in open heart surgery centers, those with high case loads had low mortalities and morbidities, and those with low case loads had high mortalities and morbidities. The differences did not appear to be explicable by differences in severity of disease in patients at different centers, but, perhaps, by differences in technical proficiency of the different teams. For such entities as congenital heart disease, the need for "regionalization" or some degree of centralization of resources and professional personnel is more obvious. Even the designation of a particular area within a hospital as the operating suite represents "specialization" of function or "centralization."

ALABAMA needs all three phases of care. One illustration of how they interrelate is the MIST (Medical Information Service via Telephone) system of hot lines in the State.[4] The single group using the MIST lines most heavily are the family physicians, particularly those in rural areas. And those answering the calls most frequently are the specialists and subspecialists in Birmingham, more than half being senior faculty members.

Another interrelation is the constant stream of requests for specialists to visit hospitals and medical groups throughout the State to hold teaching sessions. The application for family practice residencies is 35 pages long, and most of those pages deal with specialty services needed for accreditation of a family practice residency. I hope we can increase the reverse flow in the future—visits by the primary care physicians to the university medical centers for periods of days or weeks.[5]

Any rational, workable system of health care in the State of Alabama needs all three: primary, secondary, and tertiary care. The State is attempting to do a great deal of needed improving in medical care at this time, but we are attempting to accomplish these changes almost instantaneously and in a time of tight finances. Differentiation of

CONTINUED ON PAGE 47

*Me, when I was one.

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Alabama Medicine In 1776

James E. Cameron, M.D.

EUROPEAN explorers, adventurers and conquistadors had traversed Alabama, and for the most part were gone by the year 1776. There was a sprinkling of traders who remained in addition to a few colonizing outposts scattered over the Alabama territory. Except for these, the population of the territory predominently consisted of Indians: Alabamas, Creeks, Choctaws, Muskogees, etc.

Because Spanish, British and French settlements were few and far between, we must consider Indian medicine if we are to consider Alabama medicine in 1776.

At the time of De Soto's incursion into what is now Alabama in 1540, there were perhaps five times as many Indians as remained in 1776. Not only had the Indians been killed, captured and enslaved by the early explorers but some had been pushed west. Many more had died of diseases introduced by the Europeans.

THE Indians acquired both good and bad things from the Europeans, among them many "then-incurable" diseases. In the package deal, tuberculosis, typhus, diphtheria, measles, guns and gun powder came along with cows, horses, pigs, wheat and Christian religion. Small pox was introduced from Africa in 1738 by a slave ship at Charleston. Furthermore, the explorers, conquerors, and the traders did not pass on to the Indians the medical wisdom of the ages that had been handed down to them from Hippocrates, Galen, Harvey, Hunter, and Pare—they just brought the diseases. No remedies.

These explorers did take back to Europe with them at least three new drugs that were to be used in the practice of medicine: Chincona bark, ipecac and tobacco. The Chincona bark was used in the treatment of fevers (they were poorly differentiated in that day) and the ipecac was used to induce that prevalent form of treatment—vomiting. Tobacco was used both for pleasure and as a drug.

MEDICAL practice in Alabama in 1776 was very primitive, but medical practice in the most advanced societies (European, Asiatic, or in the cities of North America) was also quite basic at that time. Cupping, bleeding, purging, induced vomiting, fomentations, enemas, scarification and such measures were about the only treatments in vogue. By 1776 only a few people had been graduated from America's one and only medical school, the School of Medicine of the University of Pennsylvania.

The stethoscope was still half a century away. The first person had not been vaccinated for smallpox. Anesthesia was 90 years in the future and antisepsis, asepsis, and the "germ theory" of diseases were undreamed of. But the germs were there. People were dying young of tuberculosis, typhoid, typhus, malaria, smallpox, measles (yes, measles), whopping cough, diarrhea, cholera and pneumonia.

"The Choctaws entertained a great veneration for their medicine men (or doctors) who practiced upon them constant frauds. Their fees were exorbitant, and required to be satisfied in advance. When a doctor had attended a patient for a long time and the latter had nothing more to give as payment, he usually assembled the relations in private, informing them that he had done all in his power and had exhausted his skill endeavoring to restore their loved one; that he would surely die, and it was best to terminate his sufferings. Reposing the blindest confidence in this inhuman declaration, two of them then jumped upon the patient and strangled him.

IN 1782, one of these doctors thus began to consult with the relations about the case of a poor fellow. While they were out of the house, he suspected their intentions. Making an unnatural effort, he crawled to the woods which, fortunately, were near the house. It was night and he succeeded in getting beyond their reach. The doctor persuaded them that he was certainly dead. They erected a scaffold as though he were upon it and wept around it.

"Fortunately, laying his hands upon an opossum, the poor fellow ate of it from time to time, and gained strength, now that he had escaped the clutches of the doctor who had nearly smoked and bled him into the other world. At length, after much suffering, he made his way to the Creek nation and threw himself upon the compassion of Colonel McGillivary who had him restored to health by proper attention.

"Again going back to his nation at the expiration of three months, he arrived at the house from which he



Alabama Medicine In 1776

James E. Cameron, M.D., Alexander City, Alabama

had escaped—at the very time that the people were celebrating his funeral by burning the scaffold and dancing around it. His sudden appearance filled them with horror and dismay. Some fled to the woods, others fell upon the ground.

"**ALARMED** himself, he retreated to the house of a neighbor who instantly fell on his face, saying, 'Why have you left the land of the spirits if you were happy there? Why do you return among us? Is it to assist in the last feast which your family and your friends make for you? Go, return to the land of the dead for fear of renewing the sorrow which they have felt at your loss!'

"Shunned by all his people, the poor Choctaw went back to the Creek nation, married a Tuskegee woman and lived in that town the balance of his life. Before his door lay the four French cannon of old Fort Toulouse. When the Choctaws had become satisfied that he did not die, and was really alive, they killed the doctor who had deceived them. They often entreated the fellow to return home, but he preferred to remain among a people who would not strangle him when he was sick."[1]

When an Indian tribe engaged in battle, the wounded warrior had small chance for survival if his tribe did not triumph in the competition. As a captured foe, he could count on being dealt with most harshly by the enemy.

THE WOUNDED warrior who made the trek back to his own settlement likewise did not have a happy outlook, for his medical and surgical care would consist of purges and blood letting.

To prepare for battle, the Indian brave was segregated from the aged, the women, the inferior, and prepared in a ritulistic manner by his chief. He was given either the "big medicine" or the "little medicine." If the coming battle was expected to be very difficult, he was given the "big medicine." This was a compound of strong purgatives and perhaps some emetics. Of course, his body was also painted.

The Indians had found that certain measures would reduce the mortality of battle induced wounds. He removed all his clothing. It had been observed that a wound free of clothing fragments healed better than one so contaminated. It had also been observed that an empty intestinal tract withstood insult better than a full one.

The management of wounds was equally ineffective and primitive. The cleansing and covering of wounds was the only helpful treatment available.

OBSTETRICS or midwifery was a completely unknown or unpracticed art among these people. Babies were born to their mothers or the mother died in the effort to deliver a baby. We have no record of intervention and, of course, prenatal or post partum care were unknown.

Pediatrics was practically a nonexistant art. In some tribes, the mother's first male child was *killed* by the chief or the medicine man. The child that survived the hardships and privations of this culture grew to be large of size and beautiful of body. The early explorers remark that they never saw a deformed or crippled Indian. Apparently they were killed.

BERRIES and wild fruit were used by all. It seems unlikely that vitamin-deficiency diseases were prevalent. Nutrition apparently was not a great problem for the Indians of Alabama. Corn was widely grown and preserved. The forests and fields abounded in game and the Indians were not too selective in their choice of meat, for it seems established that they preserved lizard, alligator, snake, and dog as well as venison and bear meat, by the simple process of smoking.

They had a particular method of relieving the poor, which ought to be ranked among the laudable of their religious ceremonies. When the head men issued orders for a war dance, all of the fighting men of the town would assemble. But here, contrary to all their other dances, only one would dance at a time. The dancer, with a tomahawk in his hand, would hop and caper for a minute and then give a whoop. The music would then stop until he related the manner of his taking his first scalp. He would conclude his narration and cast a string of wampum, wire, plate, paint, lead, or anything he could spare, upon a large bear skin spread for the purpose. When the music began again, he would continue in the same manner through all his warlike actions.

ANOTHER would succeed him and the ceremony would last until all the warriors had related their exploits and thrown presents upon the skin. The stock thus raised, after paying the musician, would be divided among the poor. The same ceremony was used to recompense any extraordinary merit.

Little mention is made by historians of the Indians' use of alcohol and drugs, but they were both available. There is good evidence that certain mushrooms were used by the Indians to obtain an hallucinagenic effect.

MENTAL diseases were seldom recognized by the medical profession in 1776. The definitely, overtly, insane were locked up in prisons in Europe and in the cities of America. Just what the Indians did with their insane is not easily discernible from the writings of that day. Very likely, they were killed.

Selections from Albert James Pickett's *History of Alabama* have been used in this narrative. He, in turn, extensively quoted earlier French, Portugese, Spanish and English historians. The Indians themselves left us no written history.

REFERENCES

1. Pickett, Albert James, "History of Alabama," Roberts & Son, Birmingham, 1851.

Roster supplement

new members

CALHOUN COUNTY

PADGETT, Robert Fletcher, b 45, mc Univ. Calif. 72, recip. Calif. 73, P. O. Box 2208, Anniston 36201.

TANAKA, Paul Kenneth, b 47, mc Univ. Southern Calif. 74, recip. NBME 75, P. O. Box 2208, Anniston. 36201.

CLARKE COUNTY

PRESCOTT, James Claude, b 32, mc Switzerland 61, recip. Ga. 63, Thomasville Hospital, Thomasville 36784. S.

PROSPERIE, Michael Dale, b 41, mc La. State 70, recip. La. 70, Jackson Hospital, Jackson 36545.

COLBERT COUNTY

HOLCOMB, Frederic Larry, b 43, mc Ala. 68, sb 69, 249 Meadow Hill Road, Sheffield 35660. U.

ETOWAH COUNTY

GRAHAM, James Lawrence, b 35, mc LSU 61, recip. La. 61, 303 Bay Street, Gadsden 35901. Ob-Gyn.

WELLS, Richard Jay, b 43, mc Univ. Va. 69 recip. Va. 69, 303 Bay Street, Gadsden 35901. Path.

JEFFERSON COUNTY

BLACK, Robert Lee, III, b 43, mc Ala. 74, recip. NBME 75, 1012 Drexel Parkway, Birmingham 35209. I.

BROCKWELL, Charles Phillip, b 49, mc Ala. 74, sb 75 1615 North 25th Street, Birmingham 35234. Ob-Gyn.

CARPENTER, John T., b 42, mc Tulane 68, recip. La. 68, UAB University Station, Birmingham 35294. Hem.

ERMOCILLA, Rufino, b 42, mc Univ. of Panama 68, Limited Lic. 73, UAB University Station, Birmingham 35294. Path.

LAWTON, Alexander Robert, III, b 38, mc Vanderbilt 64, recip. Tenn. 64, UAB Station, Birmingham 35294. Pd.

MORENO, Hernan, b 39, mc Universidad del Valle 63, Limited Lic. 68, UAB Station, Birmingham 35294. Pd.

NAFTEL, Robert Smith, b 45, mc Ala. 71, recip. NBME 72, 3928 Montclair Rd., Suite 134, Birmingham 35213. R.

OMURA, George Adolf, b 38, mc Cornell 62, recip. NBME 63, UAB University Station, Birmingham 35294. Hem.

PEREIRA, Fabio, b 46, mc Universidad del Valle 71, Limited Lic. 75, UAB University Station, Birmingham 35294. Pd.

STAGNO, Sergio B., b 41, mc Univ. Chile 67, Limited Lic. 74, 1720 7th Ave., South, Birmingham 35294. Pd.

VIRGIN, William Beverly, Jr., b 42, mc Ala. 69, recip. NBME 70, 1803 14th Ave., S., Birmingham 35205. Oph.

WADE, John Sherer, b 49, mc Ala. 74, recip. NBME 75, Lloyd Noland Hospital, Fairfield 35064. S.

WALTON, Philip Dean, b 44, mc Ala. 70, recip. NBME 71, USAF Regional Hospital-Maxwell, Maxwell AFB, Montgomery 36112. Ob-Gyn.

WHITTINGTON, Edward Caroll, b 46, mc Ala. 74, sb 76, 1615 North 25th Street, Birmingham 35234.

WINGO, Bobby Bruce, b 49, mc Ala. 74, recip. NBME 76, UAB University Station, Birmingham 35294. Anes.

LOWNDES COUNTY

GOORE, Myrtle Eliza, b 47, mc Jeff. Med. Col. 74, recip. NBME 75, P. O. Box 735, Hayneville 36040.

NIEDERMAN, Leo Gerard, b 46, mc St. Louis 73, recip. Missouri 73, P. O. Box 735, Hayneville 36040.

MOBILE COUNTY

LEE, John David, b 41, mc La. State 67, recip. La. 67, 125 Louiselle Street, Mobile 36607. S.

MASSING, George K., b 38, Western Reserve 64, recip. Ohio 64, 5908 Shenandoah Rd., S. Mobile 36607. I.

MONTGOMERY COUNTY

BRASITUS, Thomas Albert, b 45, mc Jeff. Med. Col. 71, recip. NBME 72, 3403 Fountain Circle, Montgomery 36111. I.

address changes

COVINGTON COUNTY

MOORE, Morgan J., present Andalusia to 601 By-Pass West, P. O. Drawer 370, Andalusia 36420.

CULLMAN COUNTY

HOLLOWAY, Clyde L., present Cullman to 1900 Main Ave., S.W., Cullman 35055.

WEATHERS, Bobby W., present Cullman to 106 West Bridge St., Saratoga, WY. 82331.

JEFFERSON COUNTY

HUDSON, Noland L., present Birmingham to Carraway Methodist Hospital, 1615 North 25th Street, Birmingham 35234.

KELLY, James B., present Birmingham to 7714 Second Ave., South, Birmingham 35206.

KHARE, Santosh K., present Birmingham to Cooper Green Hospital, 1515 6th Ave., S., Birmingham 35233.

WALDROP, Edwin G., present Birmingham to 2660 10th Ave., South, Birmingham 35205.

WOODMAN, T. David, present Bessemer to 904 Medical Center Drive, P. O. Box 688, Bessemer 35020.

MARION COUNTY

SASSER, Ramon C., present Hamilton to 1325 South Military Street, Hamilton 35570.

MARSHALL COUNTY

CHRISTIAN, Kenneth G., present Albertville to Box 68, Albertville 35950

MOBILE COUNTY

HIGHTOWER, Billy M., present Mobile to 1367 Government Street, Mobile 36604.

RAY, Joseph B., present Mobile to P. O. Box 7132, Mobile 36607.

MONTGOMERY COUNTY

HAGER, Roy T., present Montgomery to 2055 Normandie Drive, Montgomery 36111.

MORGAN COUNTY

BROWN, William A., Jr., present Hartselle to Parkway Professional Bldg., 1510 Beltline Rd., Decatur 35601.

ISER, Martin, present Hartselle to Parkway Professional Bldg., 1510 Beltline Rd., Decatur 35601.

removed

AUTAUGA COUNTY

KINSEY, Herbert P., removed.

CONECUH COUNTY

GALLE, Stanley J., Jr., and HILL, Robert E., removed.

DALLAS COUNTY

PARISH, Havner, and VARADHAN, John, removed.

LOWNDES COUNTY

SEGALL, Nathan, removed.

TUSCALOOSA COUNTY

BANE, Dennis M., DRYNAN, James R., HENSLE, Terry W., KIMBROUGH, James E., SANTINA, Henry D., and SNEED, Raphael C., removed.

Necrology

Edward G. Mize, M.D.
1920 - 1976



Dr. Mize

Dr. Edward G. Mize, Huntsville Anesthesiologist, passed away Thursday, February 5, at the age of 55. He was a graduate of the Medical College of Georgia and was a practicing physician in Atlanta prior to his coming to Huntsville in 1963.

He was an anesthesiologist with Anesthesia Associates of Huntsville, a member of Phi-Rho Sigma Fraternity, the AMA and MASA.

Dr. Mize served in the Navy during World War II. He was a member of the Trinity United Methodist Church of Huntsville. He is survived by his wife, Mrs. Hettie Allen Mize and their son and daughter.

John M. Miller, III, M.D.
1931 - 1976

Dr. John Melville Miller, III, Professor and Chairman of the Department of Rehabilitation Medicine, UAB, passed away Sunday, February 29, at the University Hospital, Birmingham. He was 44 years of age. A native of Dordova, Dr. Miller received his medical degree from UAB School of Medicine. He was Medical Director for Spain Rehabilitation Center; Director, Rehabilitation, Research and Training Center and Regional Spinal Cord Injury; and President of the medical staff at Lakeshore Hospital, Birmingham.

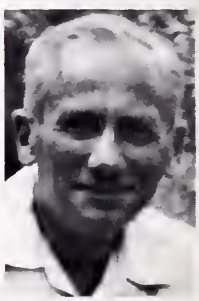
Jackson B. Dismukes, Sr., M.D.
1903 - 1976



Dr. Dismukes

Jackson B. Dismukes, Sr., M.D., former Health Officer for five Alabama counties, passed away February 4 at Maxwell Air Force Base Hospital. He was 72 years of age. From 1959 to 1972, he served as Health Officer for Autauga, Bullock, Butler, Crenshaw and Lowndes couties. He was a native of Geneva and received his medical degree from the University of Illinois School of Medicine.

Joseph Weinrib, M.D.
1904 - 1976



Dr. Weinrib

Joseph Weinrib, M.D., Montgomery internist-cardiologist, died February 4 at the age of 71. He graduated from Long Island Medical School and had been in practice in Montgomery since 1940. At the time of his death, he was in practice with his son, M. M. Weinrib, M.D. He was a Diplomate of the American Board of Internal Medicine, a Fellow of the American College of Cardiology and an Associate of the American College of Physicians. Dr. Weinrib served on the staffs of St. Margaret and St. Jude Hospitals. ■

Roster supplement

(CONTINUED FROM PAGE 33)

reinstated

CALHOUN COUNTY
FAGAN, Philip John, b 17, mc Creighton 42, recip. Ore. 53, 429 E. 9th St., Anniston 36201. Or.

ETOWAH COUNTY
GREENBERG, Harry Lee, b 07, mc Univ. Va. 40, recip. Va. 53, 1011 Forrest Ave., Gadsden 35901. R.

JEFFERSON COUNTY
KENT, Sidney Page, b 30, mc Ala. 50, recip. NBME 54, UAB University Station, Birmingham 35294. Path.

transferred

COLBERT COUNTY
MATHEWS, Robert David, 505 N. Columbia Ave., Sheffield 35660. From Jefferson County Medical Society.

COFFEE COUNTY
McLEOD, Coleman Douglas, 232 Forest Ave., Enterprise 36330. From Covington County Medical Society

HOUSTON COUNTY
PERRY, Stephen Ross, P. O. Box 6987, Dothan 36301. From Jefferson County Medical Society.

MORGAN COUNTY
HUNTER, James Webb, Jr., P. O. Box 1928, Decatur 35601. From Lauderdale County Medical Society.

TALLADEGA COUNTY
GRUBBS, Roy James, Jr., Sylacauga, 35150. From Autauga County Medical Society.

deceased

AUTAUGA COUNTY
DISMUKES, Jackson Bernard–2/4/76.

BULLOCK COUNTY
SMITH, Murray–1/6/76.

MONTGOMERY COUNTY
WEINRIB, Joseph–2/4/76. ■

115th ANNUAL SESSION
of the
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of the
STATE of ALABAMA

April 15 - 17, 1976

Governor's House Motel
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Physicians' placement service in Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

General Practice-Radiology, Diagnostic: Age 30; Osmania University 1968; American Board eligible-radiology; seeking multi-specialty group, single specialty group, partnership, institutional, emergency room, solo, or other. Available July 1976. LW - 02611

Family Practice: Age 31; Howard University 1973; American Board eligible; seeking partnership, multi-specialty group, solo, single specialty group, or other. Available July 1976. LW-03522.

Pediatrics-Family Practice: AGe 32; Osmania University 1966; American Board certified; seeking multi-specialty group, institutional, or single specialty group. Available July 1976. LW-00635.

Orthopedic Surgery: Age 42; University of Washington 1962; American Board certified; seeking solo or limited partnership, preferably near Gulf Coast, 100,000 plus population. Available December 1976. LW-1.

Orthopedic Surgery: Age 36; University of Maryland 1966; National Board; American Board certified; seeking single specialty group, partnership, multi-specialty group or solo. Available August 1976. LW-03545.

Internal Medicine-Emergency Medicine: Age 29, Medical College of Alabama 1972; National Board certified; American Board eligible; seeking emergency room, industrial, or multi-specialty group. LW - 03382

Internal Medicine: Age 27; University of Miami 1973; National Board certified; American Board eligible; seeking single specialty group, partnership, multi-specialty group, or solo. Available July 1976. LW - 02551

Internal Medicine-Gastroenterology: Age 33; Medical College of Virginia 1969; National Board certified; American Board eligible; seeking multi-specialty group, institutional, single specialty group, or partnership. Available August 1976. LW - 02599

Internal Medicine-Gastroenterology: Age 33; University of Iowa 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership. Available July 1976. LW - 01817

Internal Medicine: Age 32; University of Kentucky 1970; National Board certified; American Board eligible; seeking solo, partnership or research. Available July 1976. LW - 03320

Pediatrics: Age 30; SUNY Upstate New York 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership, solo, or other. Available July 1976. LW - 02336

Surgery: Age 38; Jefferson Medical College 1966; National Board certified; American Board certified; seeking single specialty group, partnership, multi-specialty group. Available August 1976. LW - 02968

Surgery: Age 34; Loyola University Stritch 1968; National Board certified; American Board eligible; seeking partnership, single specialty group, multi-specialty group, solo, or institutional. Available August 1976. LW - 02954

PHYSICIANS WANTED

(Opportunities For Practice)

GENERAL SURGEON needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36 bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-14

Physicians wanted **(General Internal Medicine, Gastroenterologist, Dermatologist)** Trade area, 400,000 population. Population of town: 45,000, located in Northeast Alabama. Small town advantages with big city conveniences within hour's drive. Ground floor professional opportunity to join a group of internists in the development of programs in General Internal Medicine, medical specialties, and other disciplines appropriate for the establishment of a regional multispecialty health clinic. Financial arrangements negotiable. No investment necessary. Opportunity for partnership in two years. PW-8

A community with combined population of 10,000 located near Mobile, Alabama is seeking a **general practitioner.** Office space available with living quarters. Several churches and schools. PW-9

General Practitioner's 2 family physicians wanted for general practice in a 64-bed hospital, located between 2 North Alabama towns (in the heart of the Tennessee Valley) with a trade population of 18,000. Office space available. Within 35 miles of large city. Large amount of industrial work in our area. PW-7

WANTED—**General Internist** or Subspecialist with interest in general medicine. University town, population approximately 60,000, to join 4 other internists in a multi-specialty clinic setting; 250-bed expanding general hospital; all-specialty coverage, office expansion in progress; attractive living area. PW-11

Tri-community area of approximately 20,000 population located in a tri-city area of approximately 200,000 population in south central Alabama is seeking a **General Practitioner**. Existing building available for renovating. Churches, schools, recreational facilities; also military privileges and services available in the area. PW-1.

(CONTINUED ON PAGE 42)

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Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

P·M·A
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D. C. 20005

Digest of actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the March 17 meeting of the State Board of Censors:

- Approved Financial Statement for period ending February 29, 1976, which shows receipts in the amount of $386,673.49 and disbursements in the amount of $69,920.64.
- Approved Auditor's Report, a part of the Secretary-Treasurer's Annual Report.
- Received as information report that 35 exhibit spaces have been confirmed as of March 11, 1976, for the 1976 Annual Session, exceeding budgeted amount of income expected from the sale of exhibit spaces.
- Nominated Dr. J. D. Bush for reappointment and Dr. W. W. Tisdale, Jr., for appointment to the Blue Cross-Blue Shield Board of Directors for terms beginning March 1, 1977.
- Nominated Dr. Eugene H. Bradley for reappointment (contingent upon his agreement to serve) to the Alabama Title XIX Medical Care Advisory Committee.
- Approved (with the understanding that the program is strictly voluntary) a cancer information system program, submitted by the Lister Hill Library of The Health Sciences, utilizing a questionnaire and interviewing physicians personally.
- Instructed Council on Medical Education to prepare a proposed budget for CME programs to be presented to the Board of Censors for approval.
- Recommended that the Council on Legislation establish an ad-hoc committee composed of an internist, anesthesiologist, neurosurgeon, general practitioner, pathologist and cardiovascular surgeon to study the proposed bill to define death and report its recommendations to the Council on Legislation.
- Adopted proposed bill to permit a professional association to establish and administer insurance programs for its membership.
- Referred to Council on Legislation the proposed bill to define contingency fees.
- Received as information Digest of Actions of the Council on Socio-Economics.
- Approved identification card submitted by Mr. Ralph Maril for MASA's Disability Program.
- Approved CNA In-Hospital Money Plan. ■

ANTI-SUBSTITUTION LAW REPEALED

The Oregon Medical Association has issued a reminder to its members about the existence of a new state law (S.B. 168), which repealed Oregon's anti-substitution law. The new law allows the pharmacist to dispense any drug product which, in his professional judgment, is therapeutically equivalent to the product prescribed by the physician, provided the following criteria are met:

(1) The physician does not designate in his own handwriting or via oral communication, "no substitution" (N.S.); (2) the patient does not object; (3) a drug product of the same generic name is dispensed; and (4) the cost of the dispensed drug is not higher than the price of the prescribed product. ■

(CONTINUED FROM PAGE 37)

PHYSICIANS' PLACEMENT SERVICE

Opportunity for **General Practitioner** in town of 3,000 population; trade area 16,000 population located in southeast Alabama, within short distance of city of 35,000 population where there are two hospitals. Located 85 miles from Gulf Coast beaches. Office space and equipment available. Last physician in town died two years ago. Industrial and farming area. Churches, schools and recreational activities. PW-2.

Opportunity for **General Practitioner** in town of 4,000 population; trade area 30,000 population located in southeast Alabama within short distance of hospitals. One g.p. and two dentists presently in the town. Agricultural and industrial area. PW-3.

General Practitioner—Opportunity in central Alabama town of 5,000 population, with a trade area of 30,000 population. Located 30 miles east of Montgomery, Alabama, and 28 miles west of Auburn University. Adjacent to Lake Martin. A new 77-bed hospital with a new Medical Arts Complex adjoining with office space available. Guaranteed income for a General Practitioner or Family Physician. PW-4.

General Surgeon needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36-bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-13/1.

Full-time Faculty Position: Board Certified **Family Physician** to teach/practice in new and growing medical school. Teach family practice residents/medical students. Competetive salary/fringe benefits. An affirmative action/equal employment opportunity employer. PW-5.

GENERAL PRACTITIONER needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36 bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-13

General Surgeon wanted. Tremendous opportunity to associate with General Surgeon in North Ala. Located in the heart of Tennessee Valley Mountain Lake Region. Small town setting, pop. 10,000. Two hospitals (300 beds), ten minutes from Decatur, pop. 45,000. Thirty minutes from Huntsville. Unlimited recreational activities; golf, tennis, sailing. Excellent school system and cultural activities. PW-12 ■

LITTLE RISE IN DRUG PRICES

According to the U. S. Bureau of Labor Statistics cost-of-living index for 1975, prescription drug costs have risen only 9 per cent since 1967, compared to these price levels for the same period: all consumer items, 61 per cent; medical care, 69 per cent; food, 75 per cent; clothing, 42 per cent; housing, 67 per cent; transportation, 51 per cent.

New physicians licensed to practice in Alabama



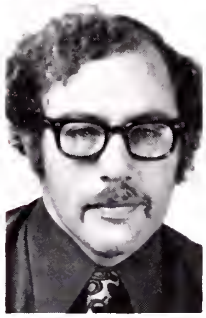
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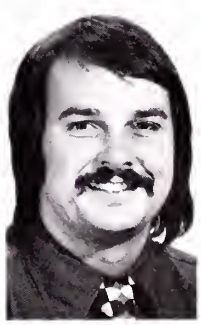
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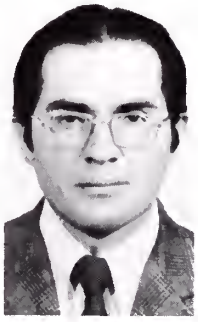
Ploth, David William, M.D., Univ. of Iowa College of Medicine, 1967. Reciprocity with Iowa. Specialty: Internal Medicine. Location: Birmingham.



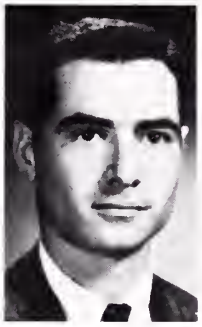
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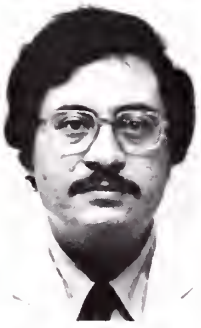
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Williams, Ted Alexander, M.D., Univ. of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners. Location: Houston Co.



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Perkins, Rex Beach, Jr., M.D., Univ. of Alabama School of Medicine (Birmingham), 1974. State Board Examination.



Verstandig, Charles Coleman, M.D., Univ. of Tennessee College of Medicine, 1939. Reciprocity with Tennessee. Specialty: Radiology.

CME QUIZ

CORRECT ANSWERS:

1.	E	6.	E
2.	B	7.	D
3.	A	8.	C
4.	E	9.	D
5.	E	10.	D

ontinuing Medical Education

DIRECTIONS: Each of the questions or incomplete statements below is followed by four or five suggested answers or completions. Select the one that is best in each case and circle.

1. In a patient with acute purulent pericarditis caused by penicillin G-sensitive Staphylococcus aureus, the therapy of choice would be:
   (a) administration of penicillin G. alone in large doses, parenterally
   (b) administration of penicillin G. plus streptomycin
   (c) repeated needle aspirations with the instillation of penicillin G, plus parenteral penicillin G.
   (d) administration of oxacillin (Prostaphlin), orally, in large doses
   (e) open surgical drainage of the pericardium, plus administration of penicillin G, parenterally
2. A 24-year-old man was previously in good health except for a known moderate-size ventricular septal defect. Without warning he developed severe chest pain, dyspnea, a continuous murmur and a water-hammer pulse. The most likely cause of these sudden changes is:
   (a) acute aortic incompetence
   (b) ruptured aneurysm of the sinus of Valsalva
   (c) acute massive pulmonary embolization
   (d) dissecting aneurysm of the ascending aorta
   (e) ruptured chordae tendineae of the mitral valve
3. The most commonly observed symptom or sign of pulmonary embolism without pulmonary infarction is:
   (a) dyspnea with tachypnea
   (b) cardiac arrhythmia
   (c) temperature greater than 38.3 C (101.0 F)
   (d) pleural friction rub
   (e) accentuated pulmonary valve closrure sound (P_2)
4. Which of the following is of definitive diagnostic value in differentiating constrictive pericarditis from amyloid heart disease?
   (a) Jugular venous pressure of 25 mm Hg
   (b) Prominent Y descent of V wave in the jugular venous pulse
   (c) Presence of a ventricular filling sound
   (d) Low voltage of the QRS complexes in the limb leads of the electrocardiogram, with generalized T-wave abnormalities
   (e) None of the above
5. Which of the following statements applies to patients with myocardial infarction who are in cardiogenic shock?
   (a) Arterial blood $p0_2$ is usually low, but increases normally with oxygen administration
   (b) Central venous oxygen saturation is usually 70 per cent or higher
   (c) Left ventricular end diastolic pressure is often normal
   (d) Methoxamine (Vasoxyl) is a desirable agent for increasing blood pressure
   (e) None of the above
6. A 26-year-old man is brought to the emergency room comatose and profusely diaphoretic. He is moderately cyanotic, and is found to have a pulse rate of 120/min, a respiratory rate of 30/min and diffuse rales and wheezes throughout both lungs. A more detailed examination shows some sclerosis and pigmentation in the region of the antecubital veins. A roentgenogram of the chest shows pulmonary edema and a heart of normal size. The most likely cause of this patient's condition is:
   (a) an overdose of "speed" (amphetamines)
   (b) a "bad trip" from unknown hallucinogens
   (c) pneumococcal pneumonia
   (d) multiple pulmonary emboli
   (e) an overdose of heroin
7. A patient with respiratory failure, being ventilated through an endotracheal tube, develops a supraventricular arrhythmia with a ventricular response of 160/min. Arterial blood gas studies shows a $p0_2$ of 65 mm Hg, a $pC0_2$ of 28 mm Hg and a pH of 7.58. Cardioversion is attempted several times unsuccessfully. Which of the following is most likely to restore sinus rhythm?
   (a) Administration of procainamide (Pronestyl), intravenously
   (b) Administration of diphenylhydantoin (Dilantin), intravenously
   (c) Administration of propranolol hydrochloride (Inderal), intravenously
   (d) Correction of alkalosis
   (e) Intravenous digitalization
8. A 33-year-old woman with a history of rheumatic fever and chronic atrial fibrillation had, on auscultation at the apex, a rumbling diastolic murmur that began with an opening snap and extended to the next first heart sound, even during long cycle lengths. It could be predicted that a simultaneous recording of left atrial and left ventricular pressures would show:
   (a) presystolic distention of the left ventricle
   (b) absence of an end diastolic gradient across the mitral valve
   (c) a persistent end diastolic gradient across the mitral valve
   (d) a left atrial systolic (V) wave with rapid descending limb (Y descent)
   (e) marked elevation of the left ventricular end diastolic pressure
9. Which of the following findings permits the best clinical assessment of the severity of valvular aortic stenosis in a 50-year-old man?
   (a) Grade 5/6 aortic murmur of crescendo-decrescendo character transmitted to both carotid arteries
   (b) Presence of an ejection click with an aortic outflow murmur
   (c) Absence of an aortic valve closure sound (A2) in association with an aortic outflow murmur
   (d) Severely delayed upstroke, damping and prolongation of the carotid arterial pulse
   (e) Calcification of the aortic valve as seen on a roentgenogram of the chest
10. Which of the following sequelae is LEAST likely to occur in this patient?
    (a) Congestive heart failure
    (b) Cardiac arrhythmias
    (c) Systemic embolization
    (d) Myocardial rupture
    (e) Myocardial infarction

CORRECT ANSWERS ON PAGE 44

CME CALENDAR

APRIL

● April 1, Spring Scientific Symposium, Huntsville Academy of Medicine, Sheraton Motor Inn, Huntsville.

● April 1-3, Emory University School of Medicine—Surgery, "General Surgical Approach To Vascular Disease," Omni International, Atlanta, Georgia, Category I Credit Available.

● April 2, 1976, Vanderbilt School of Medicine, "Postgraduate Course In Allergy," Vanderbilt University, Nashville, TN. Category I PRA and AAFP Credit available. For further Info: Paul E. Slaton, M.D., DME; 305 Medical Arts Bldg. Nashville, TN. 37212.

● April 5-7, Emory University School of Medicine—Pediatrics, "Neonatology For The Pediatrician," Grady Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 5-7, 1976, Medical Group Management Association, "Seminars On Medical Group Systems Development And Facility Design Construction And Financing," Maison Bupuy Hotel, New Orleans, La.

● April 5-8, 57th Annual Session, American College of Physicians, Philadelphia, Pa.

● April 8, Rural Health Care In Alabama, Conference Room A, Basic Sciences Building, UAB Medical Center, Birmingham, Alabama.

● April 8-10, Emory University School of Medicine—Obstetrics & Gynecology, "Gynecology Oncology and Instruction In Colposcopy," Crawford W. Long Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 8-10, Emory University School of Medicine—Orthopedic Surgery, "Techniques In Orthopedic Surgery," Grady Memorial Hospital, Atlanta, Georgia, Category I Credit Available.

● April 8-10, Emory University School of Medicine—Gastroenterology, "Three Days of Gastroenterology," (Sponsored by the American College of Gastroenterology), Royal Coach Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● April 8-11, 1976: Society of Obstetric Anesthesia and Perinatology, Annual Meeting. Orlando Hyatt House, Orlando, Florida. Contact: Dr. Charles Gibbs, Department of Anesthesiology, University of Florida, Box J-254, J. Hillis Miller Health Center, Gainesville, Florida 32610.

● April 9-10, "Medical, Social and Psychological Management of the Epilepsies," Miami Marriott Hotel, Miami, Florida. Category I credit available. Contact: Division of Continuing Medical Education, University of Miami School of Medicine, P. O. Box 520875, Miami, Florida 33152.

● April 15-17, 1976, 115th Annual Meeting Of MASA, The Governor's House, Montgomery, Category I Credit.

● April 19-22, Emory University School of Medicine—Cardiovascular, "The Treatment of Heart Disease," Royal Coach Motor Hotel, Atlanta, Georgia, Category I Credit Available.

● April 21-23, 1976, Vanderbilt School of Medicine & American College of Physicians, "Physiologic Basis of Clinical Endocrinology," Endocrinology Center at Vanderbilt University, Nashville, Tennessee. Category I PRA and AAFP credit available. For further Info: Paul E. Slaton, M.D.; DME; 305 Medical Arts Bldg. Nashville, TN 37212.

● April 22-24, 1976: 2nd Annual Postgraduate Course "Diagnosis and Evaluation of the High Risk Pregnancy". Limited enrollment. Tuition. University of Louisville, Kentucky.

● April 22-24, Duke University Medical Center, "Behavioral Approaches To Medical Practice," Governor's Inn, Research Triangle Park, Durham, North Carolina. 13 PRA hours available and AAFP Credit requested.

● April 23-24, "Management of Diabetic Complications," University of Kentucky Medical Center, Lexington. Registration Fee: $75 (2 days), $40 (1 day). Contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

● April 26-29, 4th Annual Spring Meeting, American College of Surgeons, Sheraton-Boston Hotel and the Statler Hilton Hotel Boston, Massachusetts.

● April 28-30, Symposium on Gastrointestinal Radiology, Lexington Hilton Inn, Lexington, Kentucky. Registration Fee: $300. For further information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington Kentucky 40506.

● April 30-May 1, 1976, Vanderbilt School of Medicine, "Human Genetics," Vanderbilt University, Nashville, Tennessee. Category I PRA and AAFP Credit available. For further Info: Paul E. Slaton M.D., DME; 305 Medical Arts Bldg. Nashville, TN 37212.

MAY

● May 6-8, "Gastroenterology" Postgraduate Course, University of Arkansas Medical Center, Little Rock, Arkansas. Sponsor: American College of Physicians. Category I Credit available for PRA.

● May 10-13, 1976: American College of Obstetricians and Gynecologists, Annual Meeting. Dallas, Texas. Contact: ACOG, One East Wacker Street, Chicago, Illinois 60601.

● May 13-14, 1976, Annual CV Scientific Sessions, Birmingham-Jefferson Civic Center.

● May 21-22, Internal Medicine Scientific Meeting, Grand Hotel, Point Clear, Alabama. (Alabama Regional Meeting of the American College of Physicians). Information: Thomas N. James, M.D., University of Alabama Medical Center, Birmingham, Alabama 35294.

● May 26-27, 1976, Vanderbilt School of Medicine, "Annual Seminar In Psychiatry," (Fifteenth), Vanderbilt University, Nashville, TN. Category I PRA and AAFP Credit available. For further Info: Paul E. Slaton, M.D., DME; 305 Medical Arts Bldg. Nashville, TN 37212. ■

FULL-TIME ER PHYSICIAN

for modern, expanding, fully-accredited 467-bed regional medical center with low malpractice ins. rates, salary and fringe negotiable, progressive staff with specialty back up. Excellent schools, college facilities, cultural activities, recreational activities. Contact Dan S. Wilford, Adm., North Mississippi Medical Center, 830 South Gloster St., Tupelo, Ms., 38801. (601) 842-3632.

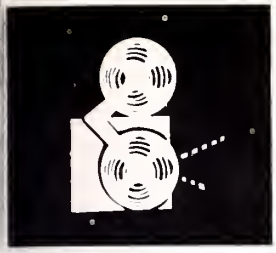
ADVERTISEMENT
FOR PHYSICIAN FACULTY

Physician faculty positions open in community-based clinical program for third-and-fourth-year medical students and large family practice residency program. Openings are either immediate or July 1, 1976. The following positions are available:

Psychiatry—Chief of Service and 2 Asst. Prof.
Int. Med.—Chief of Service and 2 Asst. Prof.
Pediatrics—2 Asst. Prof.
Community Med.—2 Asst./Assoc. Prof.
Surgery—Chief of Service.

Applicants should be board eligible or certified and eligible for Alabama licensure. Send resume and information request to: W. R. Willard, M.D., Dean, College of Community Health Sciences, The University of Alabama, P. O. Box 6291, University, Alabama 35486.

The University of Alabama is an affirmative action/equal opportunity employer.



SIGHTS & SOUNDS

(The titles listed in this month's column are available from MASA's Education Department in 3/4" video-tape cassette only. If you wish to utilize any of these cassettes, contact the Education Department with your request, and the cassette will be mailed to you with a request that you return it within one week at your expense.)

NCME 233—The Diagnostic Challenge of Chest Pain—Part I; The Diagnostic Challenge of Chest Pain—Part II; Clinical Pathways of Cardiomyopathy.

NCME 234—Inguinal Hernia Repair: The Shouldice Technique; The Pill and the Informed Patient—Part I; The Pill and the Informed Patient—Part II.

NCME 235—Cutaneous Signs of Internal Malignancy; The Exercise Test; Bone Neoplasms in Children: Early Detection.

NCME 236—Congestive Heart Failure: Precision Diagnosis; Pediatric Progress: Subdural Fluid Collections; Bedside Pulmonary Artery Catheterization.

NCME 237—Congestive Heart Failure: Successful Management; Iatrogenic Drug Problems; Internal Jugular Vein Catheterization.

NCME 238—The Team Approach To Chronic Pain; The Comotose Patient: Pathophysiology; Cervical Spine: Displacement or Disease?

NCME 239—The Comotose Patient: Immediate Management and Evaluation; Outpatient Treatment of Hemorrhoids; Purpura: Interpreting the Significance.

NCME 240—Injuries of the Young Athlete; Urinary Tract Calculi; Iatrogenic Problems: Untoward Reactions to Contrast Studies.

NCME 241—Chronic Active Hepatitis; Techniques in ADL for the Adult Disabled; Fever of Unknown Origin: Diagnostic Challenge.

NCME 242—Vulvar Lesions: A New Awareness; Acne; Lower GI Bleeding: Angiographic Evaluation.

NCME 243—Headache; Diagnosis of Common, Painful Hand Disorders; The Endocrine Evaluation of Overweight Children.

NCME 244—Blunt Chest Trauma—The First Hours; Behavioral Conditioning: Therapy for Phobias; Peripheral Arterial Flow: A Noninvasive Assessment.

NCME 1305607—Management of Stroke—Part II.

NCME 2007116—Treatment of Coronary Heart Disease—Postinfarction Complications.

NCME 4149—"How I Do A Subclauian Venipuncture." ■

CASE CLOSED ON AMPAC

No investigation of AMA and AMPAC was conducted by the Federal Election Commission, despite headlines to the contrary during the "Sore Throat" allegations last summer. An FEC spokesman said that even if the facts alleged were true, there would be no violation of the Federal Election Campaign Act. Charges said that AMA officers were directing campaign aid funds of the American Medical Political Action Committee. ■

LETTERS TO THE EDITOR

CONTINUED FROM PAGE 11

to thank them for so promptly tendering the approval of accreditation for the organization.

I noted in the *Alabama MD*, Vol. 11, No. 10, that the CME Council has established diabetes as the next topic for its regionalization program. The conferences are to begin this spring in North Alabama. The thought comes to my mind that we must not neglect the lower half of the State. Can the Alabama Affiliate of the ADA have any input in such a program? Needless to say, we will be happy to cooperate at the University of South Alabama level or at the state level with the Alabama Affiliate of the ADA.

Samuel Eichold, M.D.,
Director,
Continuing Medical Education
University of South Alabama

Kiwanis Response To Physician Speaker

I am enclosing a copy of the communication about your Association's Speakers' Bureau which was mailed to all Alabama Kiwanis Club presidents and program chairmen on February 23rd. We are pleased to have an opportunity to inform our clubs about the Speakers' Bureau and the services which it is rendering. I believe several of our clubs have already responded to your invitation to have physicians come and speak before their members.

I am also enclosing a copy of our official bi-monthly bulletin. I invite the Medical Association to prepare another message of 250-350 words or less directed to our presidents and program chairmen which we will be pleased to run in the May-June issue of the *Kourier* (Kiwanis newsletter) scheduled to be mailed on or about May 1, 1976.

James L. Nisbet, Secretary-Treasurer
Alabama District, Kiwanis International ■

DEAN'S REPORT

CONTINUED FROM PAGE 31

functions and gradual building of programs can give us a system satisfactory to both patients and physicians. But haste makes waste. As Secretary of the Department of Health, Education, and Welfare David Mathews said in his talk to the Alabama Medical Alumni Association February 21, 1976, Alabama needs all three types of health manpower and facilities, and we must build the primary care without destroying the excellent tertiary care centers needed for a complete system.

REFERENCES

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ALABAMA DEPARTMENT OF PUBLIC HEALTH:

Bureau of Preventable Diseases

FREDERICK S. WOLF, M.D., DIRECTOR

SCABIES

Over the past year there have been increasing reports of scabies throughout Alabama and throughout the United States. Scabies, also known as the "seven-year itch," is caused by a mite, *Sarcoptes scabiei.* The mite burrows into the superficial layers of the skin to lay its eggs. The most common sites of infestation are the webs of the fingers, the flexor surfaces of the wrists and elbows, the anterior axilliary folds, the umbilicus, the lower back, the female nipples and buttocks, and the male genitalia. Except in infants, the face is not usually affected.

Classically, the lesion created consists of gray, threadlike burrows, often connecting vesicles or papules. Itching, which is caused by sensitization to the mite, occurs four to six weeks after the first infestation, and sooner in subsequent infestation. This results in scratching and excoriations which sometimes become secondarily infected. Diagnosis may be confirmed by microscopic identification of the mite and scrapings of the burrow. A presumptive diagnosis can be made by the presence of burrows or the characteristic distribution of the lesions.

Scabies is usually transmitted by direct contact with infested persons. However, indirect contact with contaminated clothing or bedclothes is another possible route of transmission. Inanimate environmental objects other than clothing and bedclothes do not usually contribute significantly to the transmission. Scabies is usually transmitted among family members and other close contacts, such as playmates or sexual partners.

When a case is identified, it is usually best to treat the entire family because other family members are likely to be infested even though they may not be symptomatic. It is important that at the time of treatment all potentially contaminated underwear, nightwear, bedclothes, towels, wash cloths, and personal grooming articles be thoroughly cleaned. Ordinary laundering or drycleaning destroys the mites and eggs and is sufficient for disinfection.

Treatment for infected individuals is usually carried out with 1% gamma benzene hexachloride (Kwell and others). The patient should take a vigorous shower or bath and then place 1% gamma benzene hexachloride cream or lotion over his entire body except the head. After 24 hours, another vigorous bath or shower should be taken. Itching may persist following treatment. This is common and does not necessarily signify residual infection. If necessary, a second treatment can be administered 7 to 10 days after the initial treatment.

Gamma benzene hexachloride is an irritant to the skin and also may be absorbed through intact skin and in sufficient amounts can be a central nervous system stimulant. Therefore, repeated and frequent contact with this compound should be avoided, if possible.

SYPHILIS

During 1975, the rate of infectious syphilis in Alabama was below the national average for the seventh consecutive year. The rate in Alabama was 7.6 cases per 100,000 population as compared to 12.2 for the United States.

Although Alabama is below the national average, there was a slight increase of Primary and Secondary Syphilis by some 6.3 per cent over the previous year. Montgomery County had a very noticeable increase from a 1974 total of 14 to a 1975 total of 86 cases of Primary and Secondary Syphilis.

An intensive effort to rapidly examine and treat infected syphilis patients and exposed individuals was applied throughout the year. This rapid epidemiologic approach to infectious syphilis was successful in controlling syphilis after infection was introduced into several Alabama counties.

GONORRHEA

Alabama reflected a 12.7 per cent increase in 1975, over 1974, in gonorrhea morbidity. There were 23,586 civiliar cases reported in 1975, compared to 20,920 cases reported in 1974. The number of female cases reported exceeded the male cases for only the second time ever. This is an important shift in the incidence of this disease. Physicians should become more alert to the problem of the asymptomatic female carrier of the gonorrhea.

DARKFIELD MICROSCOPY

The Darkfield Microscopy Services were provided to all private physicians in the State on a 24-hour per day seven-day per week basis. Two hundred forty-seven requests from 146 different physicians in 37 different counties were received during 1975.

The Darkfield Services are again available this year at no cost by calling collect (205) 832-3205. An updated treatment schedule is also available at no cost by calling the above number or writing the Bureau of Preventable Diseases.

VACCINES

Color changes occasionally occur after reconstitution of Merck, Sharp and Dohme single-dose live virus vaccines. It has been determined that the color change does not affect the potency of the products, and the following statement was approved by the FDA Bureau of Biologics for inclusion in package inserts:

"Color change: The usual color of the vaccine when reconstituted is pinkish to red due to the presence of phenol red, a pH indicator. Some vaccine which has been shipped in dry ice may exhibit a variation in color when reconstituted because carbon dioxide has been absorbed from the dry ice. The vaccine, if crystal clear on reconstitution, is acceptable for use whether it is red, pink, or yellow."

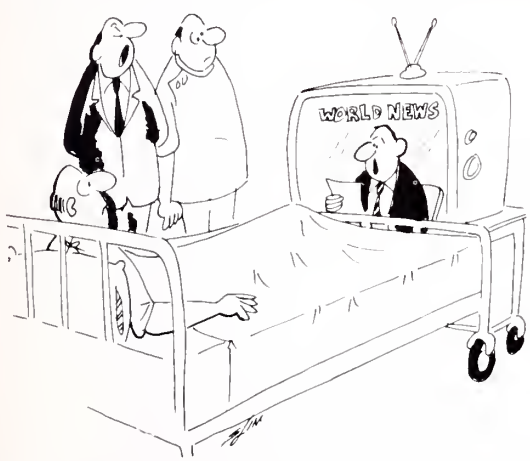
INFLUENZA

The State Laboratory has isolated Type A strain of influenza from a patient in Jefferson County. As of this date, influenza has now been confirmed in 18 states. Isolated cases may be identified between the date of this item (March 1, 1976) and publication of the *Journal.*

CURRENT MORBIDITY STATISTICS

	Jan.	Feb.	*E.E. Feb.
Tuberculosis	93	68	72
Syphilis	25	41	38
Gonorrhea	1776	1956	567
Chancroid	0	0	0
Typhoid Fever	0	0	0
Salmonella	37	23	15
Undulant fever	0	0	0
Shigella	9	7	7
Amebic dysentery	0	0	0
Scarlet fever & Strep. throat	817	685	483
Diphtheria	0	0	0
Whooping cough	0	1	2
Meningitis	11	33	8
Tularemia	0	0	0
Tetanus	0	0	0
Poliomyelitis	0	0	0
Encephalitis	3	8	0
Smallpox	0	0	0
Measles	0	0	9
German measles	0	0	11
Chickenpox	66	35	78
Mumps	34	20	69
Hepatitis	45	29	35
Typhus fever	0	0	0
Rocky Mt. spotted fever	0	0	0
Malaria	0	0	2
Rheumatic fever	51	2	8
Rheumatic heart	10	16	18
Influenza	106	56	794
Pneumonia	507	432	494
Rabies—Human cases	0	0	0
Pos. animal heads	1	2	0

As reported by physicians and including deaths not reported as cases. *E.E.—The estimated expectancy represents the median incidence of the past nine years. ■



"We're using it as a substitute for shock therapy."

Digest of actions—State Committee of Public Health

The State Committee of Public Health at its regular meeting on March 17, 1976, took the following actions:

- Approved request for death certificate information special study on aluminum workers from Equitable Environmental Health, Inc., after being assured of confidentiality safeguards.
- Reconfirmed the appointment of Betty W. Vaughn, M.D., as Health Officer in Lawrence, Limestone, Morgan and Cullman Counties for a five-year period.
- Approved State EMS Plan.
- Approved applications and transfer agreements for EMS System applications for funding under P. L. 93-154 (Sections 1202 and 1203).
- Approved Certificate of Need for AL-6010, UAB Clinical Education facility, Birmingham; and AL-6022, UAB 9th Floor East, Birmingham.
- Approved guidelines for acquiring Computerized Axial Tomography Units.
- Approved Hill-Burton grants of $50,000 and $80,000 to the Chambers County Health Center at Shawmut and to the West Alabama District Health Department respectively.
- Received, for planning purposes, Plan of Action for Selected Health Manpower except chapters 14A and 15B dealing with physicians and nurse-midwives respectively.
- Received Physician Manpower Study, Final Report, for information. Accepted Physician Manpower Study, Supplemental Report, for planning purposes and inclusion in the Plan of Action for Selected Health Manpower with the provision that this Study be distributed to the Ways and Means, and Finance and Taxation Committees of the Legislature, Chairman of the Health Committees and the Governor.
- Clarified an interpretation of the Hospital Rules and Regulations relating to physician assistants in surgery under paragraph 1501.2. (It was noted that this regulation requires the medical staff of each facility to have written policies in their by-laws and provisions must be made for a review of the records and experience in a formalized fashion.)
- Approved legislative proposals dealing with the following: Abortion Control; Solid Waste Amendments; Hearing Aid Delaers Amendment; a Hospital Categorization Bill; and referred a Nurse-Midwifery Bill for study.
- Approved Medicaid Plan Amendments regulating the payments for drugs and governing the reimbursement policy under the new drug regulations.
- Received an annual report for Medicaid for FY1975.
- Requested Medical Services Administration to provide a Medicaid position paper.
- Noted a message of commendation to the Committee for its interest in safeguarding the water supply in Castleberry.
- Received a progress report on litigation against HEW to return the planning control for Russell County to an Alabama designation instead of an interstate designation.
- Instructed the Health Officer to invite a physician to the next meeting of the Committee to emphasize the importance of accurate reporting of birth certificate information requested in the newly adopted form. ■

Humanities Seminar

The National Endowment for the Humanities has announced plans to present four humanities seminars for medical practitioners this summer at four separate medical campuses across America.

The seminars will bring physicians together with humanists from the fields of history, religion, sociology and philosophy for a month of study devoted to issues such as ethical conflicts, rights of patients and practitioners, purpose and limits of the medical profession and its relation to the community.

Up to 15 persons will attend each seminar tuition free, will receive a $1200 stipend to cover expenses, plus reimbursement for travel up to $300 maximum. Applications are invited from Alabama physicians. Application deadline for the first two seminars is April 15, (University of Pennsylvania and Stanford University); the deadline for the remaining two (University of Texas and Ohio State University) is May 13. For further information, contact Communications Dept., MASA Headquarters, Montgomery, Alabama—1-800-392-5668. ■

CLINIC FOR LEASE

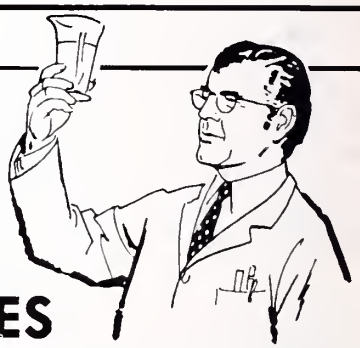
For Lease: A Dr.'s Clinic located at 1947 Warrior Rd., Bham, Ala.

For further information contact David Rogers 1st Nat'l Bank of Bham, Ala. Phone: 328-5120, Ext. 636.

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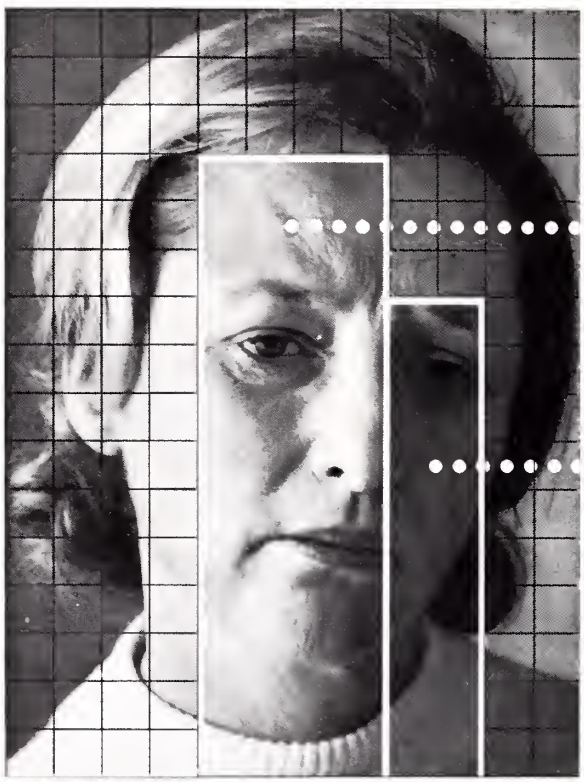
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Both often



Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

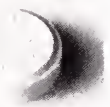
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

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According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

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in psychoneurotic anxiety states with associated depressive symptoms

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Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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The JOURNAL

of the

Medical Association of the State of Alabama

VOLUME 45, NUMBER 10 APRIL ~~MARCH~~ 1976

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price $12.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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One hundred twenty five dollars would be a very large sum to pay if you got nothing in return. But the records will show that MASA members collect "dividends" equal to twice to ten times their dues simply by availing themselves of the services offered through the Central Office.

If you have obtained your malpractice insurance through the MASA/Wausau plan, you are enjoying a premium which is exactly one-half of the amount which the Insurance Rating Office (ISO) has presented as the actuarially correct rate for Alabama physicians. If your present premium rate is $400, you would now be paying $800 had it not been for the establishment of the MASA/Wausua plan. Already you have collected a "dividend" several times more than your total dues.

If you are availing yourself of the opportunity to purchase your printed office forms directly from MASA, you are collecting another sizable "dividend." Surveys show that the average physician will spend $500 per year for printed forms, some like pathologists will buy many more different types of forms. If you are average and buy your printed forms through MASA, you have saved an amount equal to twice your dues.

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Other "dividends" are intangible upon which no evaluation can be placed—continuing education, legal, legislative and public relations programs which, if successful, bring tremendous benefits to the medical profession.

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Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

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Another Presidential Year Is Finished!



E. VERNON STABLER, SR., M.D.

The Message From The President which you are reading is the last from me as your President. The year has gone rapidly, filled with many important changes for MASA. Many needed improvements have been achieved; necessarily, a number or urgent needs remain as yet unsatisfied. The printed President's Message presented at the Annual Convention lists a number of very important achievements and gains, and points out some of the needs as well.

As outgoing President, I feel some satisfaction, some disappointment and some frustration.

The pressure on the medical profession of America is grave. More health care could be given if vast outside coercions could be reasonably met and the meddling and unnecessary controls dispensed with.

In my first Presidential message, I asked sincerely and urgently for unity in our profession. I feel that much has been gained in this area. Undoubtedly, this is the key to our success in countering the numerous threats which we face, especially those from bureaucracy. So, at the last – as at the first – I emphasize that our strength lies in the solid, united front we must present.

I do not know nor do I understand why the ever increasing controls promulgated for the medical world must all be done by non-medical, political powers and/or so-called consumers, but so it seems to be. Who, and under what guise, can other than medically trained personnel possibly know how to direct or regulate the medical system? The bureaucratic encroachments are so over-regulated, so non-specific, so loaded with paper work, that the mere care of the sick seems secondary and in danger of being forgotten. In whose behalf, then, are they working? Consumer action and bureaucratic committees with their many regulations can not possibly be other than politically oriented.

So, I go out as I came in – deeply concerned and very unhappy with bureaucratic intervention and pleading for unity in our physician forces and resources.

If, after this year, the move is toward greater unity, it has been worthwhile.

If, after this year, there is more general awareness and understanding of the Association's problems, it has been worthwhile.

If, after this year, we are at least on firmer ground and approaching a solution of our malpractice problems, it has been worthwhile.

If we have truly achieved a closer empathy and mutual understanding of purpose with the state governing body, it has been worthwhile.

If, by virtue of our new caucus type dissemination of the business of the Association, there is wider participation in our county representation, the new Constitution has been worthwhile.

If, through the continued function of our councils and governing body, there is increased understanding of the Association's business system and function by more members, the year's proceedings have been worthwhile.

If, in this year's accomplishments, I have played some part, I am most grateful and pleased. It has been worthwhile.

To you, our entire membership, I express my deep appreciation of the honor you have given me. I will treasure always the trust and confidence you showed in electing me your President, and your active support which made possible every achievement of our year.

My successor, Dr. William T. Wright, is a very capable official with knowledge of and experience in MASA affairs. Both will serve him well as he faces a very difficult year for our profession and Association. Yet, more than these, he needs, and I feel, will receive, our wholehearted support and cooperation. I wish for Dr. Wright, and for our Association, a year of great achievement and progress with the rewarding satisfaction such a year will bring.

E. Vernon Stabler



The Month In Washington

"Swine Flu" Immunization—The AMA has supported President Ford's decision to undertake a mass immunization program against the swine influenza virus. The President has asked Congress for $135 million to undertake the program in an attempt to stave off a possible epidemic of the virus this coming fall and winter.

The AMA said it felt the President's decision was "absolutely correct." The AMA statement in full:

"The AMA supports the decision of President Ford to undertake a massive national immunization campaign against the swine influenza virus. Under the circumstances, we believe his decision is absolutely the correct one.

"The AMA stands ready to assist in the national campaign in any way possible, including organizing the medical profession to insure that every person who wants to be vaccinated will be—regardless of ability to pay.

"We speak for the medical profession in committing the doctors of this nation to make whatever efforts are necessary to vaccinate the entire population. It will not be easy, but it can and must be done."

***

Medicaid Abuse—A federal-state campaign to reduce Medicaid fraud and abuse has been launched by HEW Secretary Dr. David Mathews.

A team of federal and state Medicaid examiners will begin its work in Massachusetts at the invitation of Gov. Dukakis. Another team will begin operations in June in Ohio at the request of Gov. Rhodes. HEW said it plans to focus the joint effort on states with the largest Medicaid programs.

The federal-state examiners will have two basic objectives, Secretary Mathews said. They will identify fraud and abuse and refer specific violations for possible prosecution. They will help states develop efficient program management and abuse detection systems.

HEW has developed a computerized Medicaid management information system (MMIS) to aid in the processing of claims. MMIS will alert a state if, for example, a patient was in a hospital the same day a physician claimed to have treated him at home, or if a pregnancy test was ordered on a male, HEW said.

Mathews said he plans to invite representatives of national health services provider organizations to Washington to solicit their ideas and to urge them to undertake a self-policing program and to assist the states in identifying potentially fraudulent providers.

***

Device Legislation—Now passed by both Houses and awaiting conference, medical device legislation has made members of that industry predict a bullish future. The legislation will add $250,000 to $700,000 in costs to products requiring premarket approval.

The hottest medical device will continue to be the pacemaker. Sales are expected to increase at an average annual compound rate of 9 per cent. Another big item is the cat (CAPS) scanner. Manufacturers predict 3,000 placements by 1980. The use of renal dialysis is expected to triple by 1980. Catastrophic or comprehensive national health insurance will also help the industry.

Makers of orthopedic and surgical appliances, clinical diagnostics, medicinals, and pharmaceuticals all expect steady growth. Drug companies predict biggest growth in anti-anthritics sales.

The legislation provides three categories for devices—class I, general controls; class II, performance standards; and class III, premarket approval, the general controls give FDA authority to move against devices that are misbranded or badly-made and require their registration as if they were drugs. FDA can exempt some devices from this control, such as custom devices not intended for general sale.

Class II devices would be required to meet certain manufacturing standards. The class III classification involves pre-market clearance for new products and essentially the same type of clearance for existing products. The House Commerce Committee report said it expected that intrauterine devices would fall in the class III category.

***

Clinical Labs—The Senate Labor and Public Welfare Committee has approved legislation subjecting clinical laboratories in both intrastate and interstate commerce to federal licensure and standard requirements.

The revision of the Clinical Laboratories Improvement Act (CLIA) would cover labs operating only within one state for the first time, and give HEW a stronger role in supervising the nation's clinical laboratories.

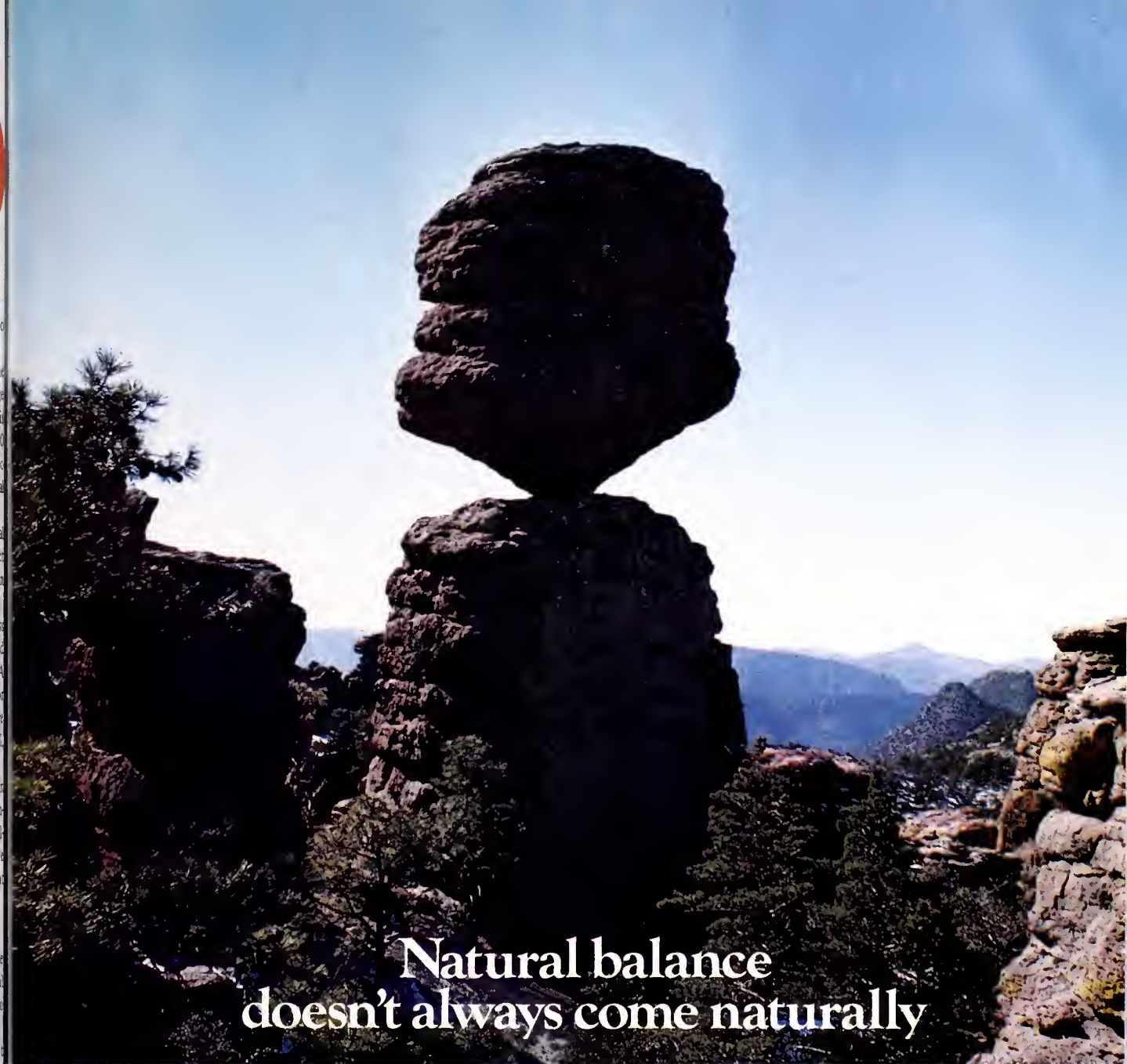
Individual physicians who perform tests solely in connection with treatment of their own patients could be exempted from the law's requirements if HEW wished. ■

FLORIDA LAW MAY HOLD LEGAL TRAP

Florida physicians may be faced with some legal difficulty with a 1974 state law which established a central registry of disabled persons. Under the law, physicians are required to report to the Florida Department of Health and Rehabilitative Services within seven days the names of severely disabled persons.

The law goes on to state that patients whose names are not reported and who lose disability benefits as a result may have legal recourse against the physician.

Possible remedial legislation is now being considered. ■



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tor

- Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
- Can relieve nausea and vomiting often associated with vertigo.*
- Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
- Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
- Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pre nancy or to women who may become pregnant is contraindicated in view of th teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestatic has produced cleft palate in the offspring. Limited studies using doses of over 100 mg kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palat Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hype sensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patien should be warned of this possibility and cautioned against driving a car or operatir dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in childr have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurr vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceutica
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

Effectiveness across the spectrum of most common forms of insomnia

Awake too long, awake too often, awake too early...

These are the most common forms of insomnia, and may occur singly or in any combination. The night of troubled sleep depicted here comprises all three types. As the night progresses from left to right, each sleep stage is identifiable by its own shade of gray. Blue represents "Awake."

As you can see, this hypothetical "patient" takes well over an hour to fall asleep, awakens several times during the middle of the night and awakens too early in the morning.

Sleep Stages

- Awake
- REM
- Stage 1
- Stage 2
- Stage 3
- Stage 4



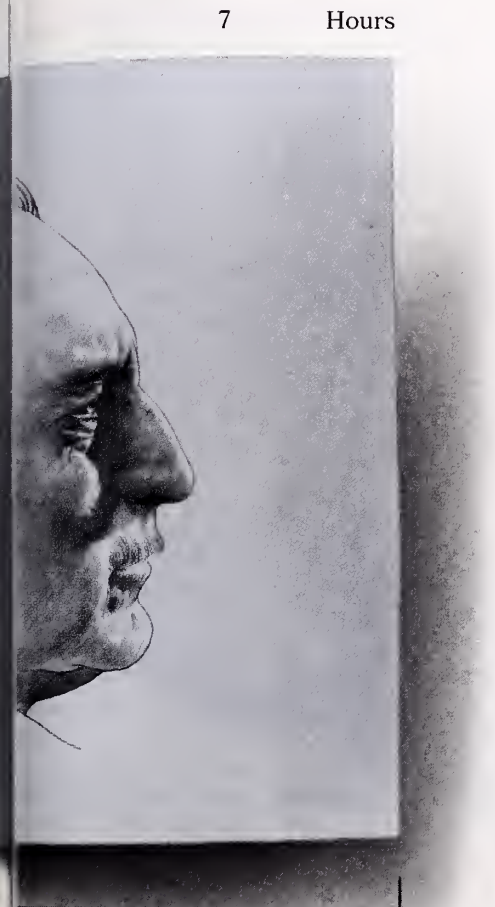
The insomnias most often occurring in young and older adults

For patients with trouble falling asleep (common in young adult insomnia patients), Dalmane (flurazepam HCl) 30 mg provides sleep within 17 minutes, on average. For those with trouble staying asleep or sleeping long enough (common in those over 50), Dalmane offers increased total sleep time with fewer nocturnal awakenings. These clinical results were demonstrated in studies conducted in four geographically separated sleep research laboratories.[1-4]

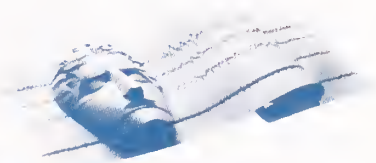
The relative safety of Dalmane (flurazepam HCl) is well documented

Dalmane (flurazepam HCl) is relatively safe and well tolerated; morning "hang-over" has been infrequent. The usual adult dosage is 30 mg; in elderly or debilitated patients, limit initial dosage to 15 mg to preclude over-sedation, dizziness or ataxia. Caution patients about possible combined effects with alcohol and other CNS depressants.

Broad-spectrum medication for the most common forms of insomnia



Awake too early



Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

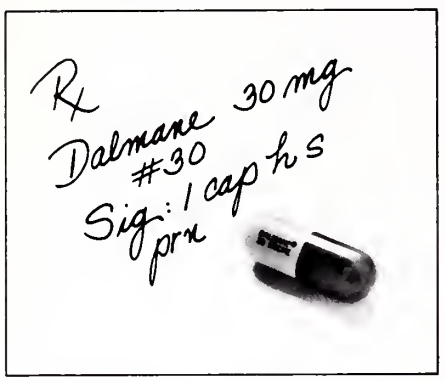
- ☐ induces sleep rapidly
- ☐ reduces nighttime awakenings
- ☐ lengthens total sleep time

ROCHE

Please see following page for a summary of complete product information.

Broad-spectrum medication for the most common forms of insomnia

Dalmane®
(flurazepam HCl) ℞ IV



Objectively proved in the sleep research laboratory, Dalmane

- induces sleep within 17 minutes, on average
- reduces nighttime awakenings
- provides 7 to 8 hours sleep, on average, without repeating dosage

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971
3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ



ROCHE

ROCHE LABORATORIES

editorials
editorials

Echoes Of Influence

The present issue of the *Journal of The Medical Association of The State of Alabama* initiates a special feature to focus upon the role of medicine in the founding of this nation and the development and growth of Alabama. The feature will run monthly as a special tribute to the Bicentennial.

The lineage of the medical practitioner in Alabama, as well as in colonial America, has been peppered with the silent influence of many dedicated and inspired physicians. They led lives that are exhilarating to study, both because of the quality of their contributions and the quality of the men who made them.

The chronicle of medical history has been a glorious one. Alabama has been fortunate in a tradition of scholarship in the field of medical history. It is to these medical illuminaries that this feature will be dedicated.

Tops In Public Confidence

When a political candidate emerges the winner despite potent opposition from special-interest groups and the press, there is a standard way of describing his success:

"He had everybody against him but the people."

Today that could reliably be said of physicians. The polls show physicians are retaining their public esteem, regardless of onslaughts from various denizens of Capitol Hill, regulatory agencies, Ralph Nader, Max W. Fine, and the *New York Times.*

According to a new survey by pollster Louis Harris, people view physicians more favorably than all other sources of their health care.

Topping the 15 categories surveyed are medical specialists, viewed favorably by 83% of the public and unfavorably by only 9%. Confidence in general practitioners has risen from 72% favorable–19% unfavorable in 1968 to 81%–16%.

Hospitals in general received a 70% favorable–27% unfavorable rating in the poll, which was conducted for the Federation of American Hospitals.

The cheering section for eventual Federal takeover of care should take note that private, nonprofit hospitals received a 60% favorable–21% unfavorable rating, compared with 53%–20% for military and veterans' hospitals.

The Harris survey also shows that the public considers higher malpractice insurance premiums one of the five major causes of climbing medical and hospital costs–along with increases in nurses' salaries, physicians' fees, office overhead, and drug costs.

A flock of other surveys shows the doctor is pretty darn popular.

Physicians were rated the most trustworthy of occupations in a survey by Chilton Research Services. In another survey, more than 8 of 10 people interviewed by Roper Reports said they are "very satisfied" or "fairly well satisfied" with both the quality and availability of their medical care. While a majority considered medical costs too high, 8 of 10 expressed satisfaction with their provisions for meeting those costs.

One good turn deserves another–so thank those patients for their votes of confidence.

Foxes In The Henhouse

There is a booming agribusiness that employs nine million hens in a 50-mile radius of Ephrata, Pennsylvania. Like its sister poultry farms located throughout the country, it is just now beginning to feel the effects of an announcement last year by the Federal Trade Commission (FTC) warning consumers that eating eggs increases the risk of heart attacks and heart disease.

The hen house is in turmoil. Not since the days of the World War II meat rationing program have the hens received such publicity, albeit this time it is much to their detriment.

The controversy began several months ago when the FTC took the position, following reliable scientific evidence, that egg eating was a prominent factor that increases one's susceptibility to heart disease. The FTC stated that eggs contain an extremely high level of cholesterol which dramatically increased those risk factors.

The American Heart Association immediately alerted the public. The anti-cholesterol movement gained momentum, with food manufacturers enthusiastically developing and marketing a variety of egg substitutes. The American Egg Board is now fighting back to save its industry.

High in protein and inexpensive, eggs became a staple of the American diet during World War II, but gradually declined in popularity after the war. Things began to get worse for the eggmen following a 1950s study of the Framingham, Massachusetts, population which isolated smoking, high blood pressure and cholesterol as prominent risk factors in heart disease.

Fearing conspiracy by the FTC, the food industry and the American Heart Association, the American Egg Board helped to create the National Commission on Egg Nutrition to spearhead a pro-egg drive, even taking ads in the *Wall Street Journal* and the *New York Times,* touting: "Cholesterol and The Egg: A Mystery."

Many scientists agreed with N.C.E.N., including leading cardiovascular surgeons Christiaan Barnard and Michael DeBakey. Dr. DeBakey said the real problem stems from heredity, not eggs. Oh no, argued the anti-cholesterol people. If nothing can be done about heredity, something can be done about diet, they stated.

The debate goes on. While physicians, researchers, food processors and drug companies are still at odds, the American Heart Association is at least 60 per cent certain that the risk of heart disease lies with dietary cholesterol. Is that enough to ban a product and destroy an industry? Does not the American consumer have the constitutional right to eat and drink as he or she pleases? And what will happen to those hens at Ephrata?



HILL CREST HOSPITAL — For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

HILL CREST HOSPITAL

HILL CREST FOUNDATION, INC.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

PHONE: (205) 836-7201

Letters to the Editor

Journal Amazon – Bound

A colleague has recently told me that you have an interesting *Journal* and that perhaps it would be worth our while to have a subscription.

We are located in the Upper Amazon Valley amid the head-hunting Shuar Indians. Our isolation from medical libraries and telephones makes it necessary to seek medical journals, books and other forms of new advances in our science.

Would it be possible to have sample copies of your *Journal* and the subscription rate sent to this address by surface mail? I am certain that your publication will be a useful addition to our library.

Sincerely,
Thomas Brown, M.D.
Medical Director
Dispensario Medico
Morona-Santiago, Ecuador

Emergency Room Study

Out of curiosity I recently did a retrospective study of the emergency room diagnoses seen in our rural, small county hospital.

While talking with Dr. James Pittman of UAB, he suggested that this study might be of some use to other physicians in Alabama (especially those involved with one of the three Family Practice Residencies in Alabama).

If you think such an article might be of considerable interest to your readers, please send me a copy of the guidelines you use for manuscripts, and I will send you a copy of the study for your evaluation and possible publication in our state medical journal.

Marc A. Armstrong, M.D.
Centreville, Alabama

PRACTICES FOR SALE—Internal Medicine—Miami, Florida. Center of all South Dade hospitals. Gross 3 plus per year. Fully equipped office for rent. One or two doctors. Associate temporarily prior to purchase. Reply to Box C, c/o Medical Association of the State of Alabama, 19 South Jackson St., Montgomery, Alabama 36104.

FOR RENT—Miami, Florida. One story brick, off street, ample parking, 22nd Avenue and South Dixie Highway. Exquisitely furnished and equipped 2,200 sq. ft., one or two doctor office. Additional 1,800 sq. ft. available. Write L. C. Johnson, M.D., 2250 S. Dixie Highway, Miami, Florida 33133, Telephone 305-856-5170.

Paper For Publication

I am submitting for publication in the *Journal of the Medical Association of the State of Alabama* the paper which I presented during the CME in Drug Therapy in Mobile, February 27th-28th, entitled "Oral Contraceptives–Which One for My Patient?" Based on the number and type of questions directed to me by the attendees at the CME course, I believe that this is a topic in which your readership is interested. If you decide to publish my paper, I might suggest a followup article on alternative or mechanical methods of contraception at a later date.

Over the years, I have enjoyed your journal. Being a third generation Alabama physician, I read the journal before becoming a member of the Medical Association of the State of Alabama. It is one of which we can be proud.

I am enclosing my paper as presented and will be happy to submit further information if you so desire.

With warmest regards, I am

Betty Ruth Speir, M.D.
Assistant Professor
Department of Obstetrics-Gynecology
Univ. of South Alabama College of Medicine
Mobile ■



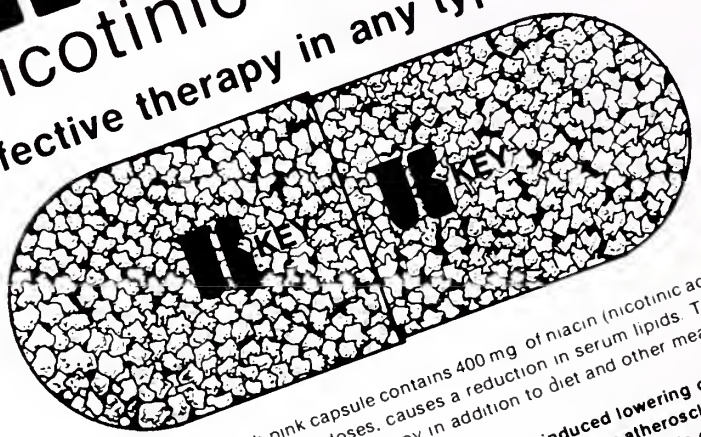
"You called?"

The Original
Slow Release
Form of Nicotinic Acid

nico-Span®

(nicotinic acid) 400 mg. capsules

Effective therapy in any type of drug responsive hyperlipidemi



DESCRIPTION: Each pink capsule contains 400 mg. of niacin (nicotinic acid) in a special pelletized formulation for prolonged rele

ACTIONS: Niacin, in large doses, causes a reduction in serum lipids. The exact mechanism of action is unknown.

INDICATIONS: As adjunctive therapy in addition to diet and other measures in the treatment of hypercholesterolemia and hyperbetalipoproteinemia

Notice: It has not been established whether drug-induced lowering of serum cholesterol or other lipid levels has a detrimental, a benefical or no effect on the morbidity due to atherosclerosis or coronary heart disease. Several years will be required before current investigations can yield an answer to this question.

CONTRAINDICATIONS: Niacin is contraindicated in patients with hepatic dysfunction or in patients with active acute peptic ulcer.

WARNINGS: The use during pregnancy and lactation or in women of childbearing age requires careful weighing of potential benefits versus possible hazards to the mother and child. There are insufficient studies done for usage in children

PRECAUTIONS: Patients with diabetes, gall bladder disease, past history of jaundice, liver disease, or peptic ulcer should be observed closely. At initial stage of therapy, liver function and blood glucose should be monitored at frequent intervals. Adjustment of diet and/or hypoglycemic therapy may be necessary. Patients undergoing antihypertensive therapy may experience an added vasodilating effect with resulting postural hypotension. Use with caution in patients predisposed to gout

ADVERSE REACTIONS: Severe flushing, decreased glucose tolerance, activation of peptic ulcer, abnormal liver function tests, jaundice, gastrointestinal disorders, dry skin, pruritus, hyperuricemia, toxic amblyopia, hypotension, transient headache.

DOSAGE AND ADMINISTRATION: The dose and frequency for the administration of NICO-SPAN should be adjusted to the response of the patient. Slow build-up of dosage in gradual increments is recommended to observe efficacy and/or adverse effects. One or two capsules three times a day is the usual dosage. The maximum daily dosage is 6 grams.

Please arrange to provide starter samples and/or complimentary "Starter" prescription booklets for: nico-Span® (nicotinic acid, 400 mg.)

Samples ☐ "Starter" Rx's ☐

Dr. _____ Specialty _____

Street _____

City _____ State _____ Zip _____

Mail to: Key Pharmaceuticals, Inc. 50 N.W. 176th Street, Miami, Florida 33169

KEY PHARMACEUTICALS, INC.
Miami, Florida 33169 (U.S.A.)

12-hour claims
are nothing new.

12-hour relief is.



NEW

Novafed® A Capsules

Each capsule contains pseudo-ephedrine hydrochloride 120 mg. and chlorpheniramine maleate 8 mg.

Controlled-Release Decongestant Plus Antihistamine

It goes the distance.





Clinical studies confirm full 12-hour effectiveness.

For years, patients have heard of drugs providing long-lasting relief. But after six or eight hours, they often run out of relief. And it's too soon to take the next dose.

Now, with Novafed A, Dow introduces a prescription capsule with 12-hour effectiveness in relieving allergy and hay fever symptoms. Placebo-controlled clinical studies show that the high level of decongestant in Novafed A provides relief for as long as 12 hours. At the same time, its antihistamine relieves the patient's itchy eyes and runny nose *without* the excessive dryness of anticholinergic agents.

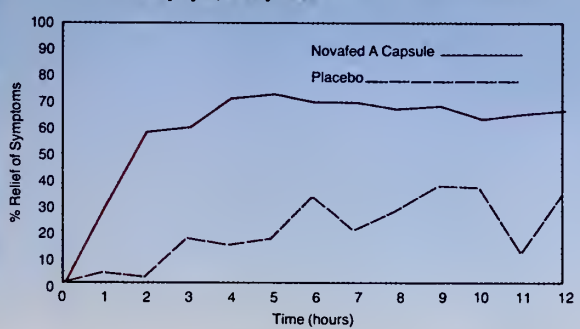
Prompt onset of effect is followed by full 12-hour relief.

(Please refer to the following page for bioavailability studies and prescribing information.)



Patients with severe pollen allergies were tested during hay fever season in a countryside environment and asked to rate severity of five different symptoms on a scale of 1 to 4.

Clinical Study: Degree of Relief from Itchy Eyes and Nose and Throat, Watery Eyes, Runny Nose*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DOW®

Specialists in Cough and Cold Care





NEW

Novafed® A Capsules

Each capsule contains pseudoephedrine hydrochloride 120 mg. and chlorpheniramine maleate 8 mg.

Controlled-Release Decongestant Plus Antihistamine

It goes the distance.



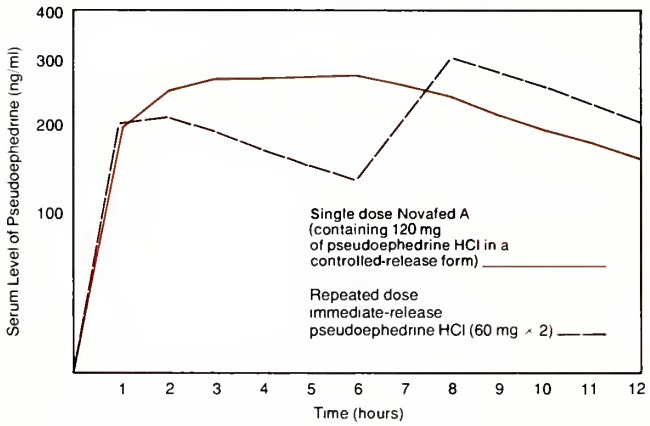
Prompt onset and sustained serum levels over 12 hours.

A bioavailability study confirmed that the sustained 12-hour action of Novafed A was comparable to that of immediate-release medication taken at 6-hour intervals.

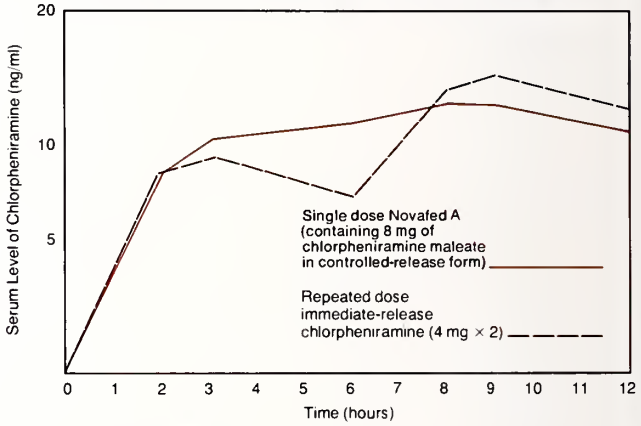
The chart at the left shows the serum levels of pseudoephedrine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 60 mg. pseudoephedrine hydrochloride in an immediate-release form. Serum levels of pseudoephedrine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

The chart at the right shows the serum levels of chlorpheniramine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 4 mg. chlorpheniramine maleate in an immediate-release form. Serum levels of chlorpheniramine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

Comparison of Mean Serum Levels of Pseudoephedrine Following Novafed A and an Immediate-Release Reference Formulation*



Comparison of Mean Serum Levels of Chlorpheniramine Following Novafed A and an Immediate-Release Reference Formulation*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DESCRIPTION: Each NOVAFED A capsule contains 120 mg. of pseudoephedrine hydrochloride and 8 mg. of chlorpheniramine maleate. The specially formulated pellets in each capsule are designed to provide continuous therapeutic effect for about 12 hours. Nearly one-half of the active ingredients is released soon after administration and the remainder is released slowly over the remaining time period.

ACTIONS: NOVAFED A combines the action of a nasal decongestant, pseudoephedrine hydrochloride, and an antihistamine, chlorpheniramine maleate. These ingredients are combined to provide prompt and sustained nasal and upper respiratory decongestant and antihistaminic action.

INDICATIONS: NOVAFED A is indicated for the relief of nasal congestion and eustachian tube congestion associated with the common cold, sinusitis and acute upper respiratory infections. It is also indicated for perennial and seasonal allergic rhinitis, vasomotor rhinitis, allergic conjunctivitis due to inhalant allergens and foods and for mild, uncomplicated allergic skin manifestations of urticaria and angioedema. Decongestants in combination with antihistamines have been used for many years to relieve eustachian tube congestion associated with acute eustachian salpingitis, aerotitis media, acute otitis media and serous otitis media. NOVAFED A may be given concurrently, when indicated, with analgesics and antibiotics.

CONTRAINDICATIONS: Symphathomimetic amines are contraindicated in patients with severe hypertension, severe coronary artery disease, and in patients on MAO inhibitor therapy. Antihistamines are contraindicated in patients with narrow-angle glaucoma, urinary retention, peptic ulcer, during an asthmatic attack, and in patients receiving MAO inhibitors.

Children under 12: NOVAFED A controlled-release capsules should not be used in children less than 12 years of age.

Nursing Mothers: Pseudoephedrine is contraindicated in nursing mothers because of the higher than usual risk for infants from sympathomimetic amines.

Hypersensitivity: This drug is contraindicated in patients with hypersensitivity or idiosyncrasy to sympathomimetic amines or antihistamines. Patient idiosyncrasy to adrenergic agents may be manifested by insomnia, dizziness, weakness, tremor or arrhythmias.

WARNINGS: Sympathomimetic amines should be used judiciously and sparingly in patients with hypertension, diabetes mellitus, ischemic heart disease, increased intraocular pressure, hyperthyroidism, or prostatic hypertrophy. Sympathomimetics may produce central nervous system stimulation and convulsions or cardiovascular collapse with accompanying hypotension.

Antihistamines may impair mental and physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery, and mental alertness in children. Chlorpheniramine maleate has an atropine-like action and should be used with caution in patients with increased intraocular pressure, hyperthyroidism, cardiovascular disease, hypertension or in patients with a history of bronchial asthma.

Do not exceed recommended dosage.

Use In Pregnancy: The safety of pseudoephedrine for use during pregnancy has not been established.

Use In Elderly: The elderly (60 years and older) are more likely to have adverse reaction to sympathomimetics. Overdosage of sympathomimetics in this age group may cause hallucinations, convulsions, CNS depression, and death. Therefore, safe use of a short-acting sympathomimetic should be demonstrated in the individual elderly patient before considering the use of a sustained-action formulation.

PRECAUTIONS: This drug should be used with caution in patients with diabetes, hypertension, cardiovascular disease and hyperreactivity to ephedrine. The antihistaminic may cause drowsiness and ambulatory patients who operate machinery or motor vehicles should be cautioned accordingly.

ADVERSE REACTIONS: Hyperreactive individuals may display ephedrine-like reactions such as tachycardia, palpitations, headache, dizziness, or nausea. Patients sensitive to antihistamines may experience mild sedation.

Sympathomimetic drugs have been associated with certain untoward reactions including fear, anxiety, tenseness, restlessness, tremor, weakness, pallor, respiratory difficulty, dysuria, insomnia, hallucinations, convulsions, CNS depression, arrhythmias, and cardiovascular collapse with hypotension.

Possible side effects of antihistamines are drowsiness, restlessness, dizziness, weakness, dry mouth, anorexia, nausea, headache and nervousness, blurring of vision, heartburn, dysuria and very rarely, dermatitis.

DRUG INTERACTIONS: MAO inhibitors and beta adrenergic blockers increase the effect of sympathomimetics. Sympathomimetics may reduce the antihypertensive effects of methyldopa, mecamylamine, reserpine and veratrum alkaloids. Concomitant use of antihistamines with alcohol, tricyclic antidepressants, barbiturates and other central nervous system depressants may have an additive effect.

DOSAGE AND ADMINISTRATION: One capsule every 12 hours. Oo not give to children under 12 years of age.

CAUTION: Federal law prohibits dispensing without prescription.

HOW SUPPLIED: NOVAFEO A is supplied in red and orange colored hard gelatin capsules, monogrammed with the Oow diamond followed by the number 109, in bottles of 100.

DOW

DOW PHARMACEUTICALS
The Dow Chemical Company
Indianapolis, IN 46268

Specialists in cough and cold care

Look at all the Continuing Medical Education opportunities the AMA has planned for you in 1976!



More and more physicians are interested in updating their medical skills and knowledge in the interest of better patient care. And, an ever-increasing number of state medical associations, specialty societies, and other medical groups are stipulating continuing medical education as a membership requirement.

In response to these developments, the AMA has greatly expanded its C.M.E. programs.

The nine regional meetings, multidisciplinary in approach, are of interest to a variety of medical specialists and physicians in primary care. Scheduled on weekends, they make it easier and more convenient for you to continue your education. Then there are the two AMA conventions. The Annual *alone* features 53 postgraduate courses, 41 3-hour symposia the new telecourses and many, many other features in continuing education.

All courses at regionals and conventions are accredited on a hour-for-hour basis in Category I.

The AMA's Physician's Recognition Award fulfills C.M.E. requirements of many organizations, state laws and individual physicians.

REGIONAL C.M.E. MEETINGS

Jan. 17, 18	Tulsa, Okla.
Feb. 28, 29	Denver, Colo.
March 17-20	Lexington, Ky.
April 3, 4	Indianapolis, Ind.
April 3, 4	Detroit, Mich.
May 9	Dallas, Tex.
Sept. 4, 5	Jackson Hole, Wyo.
Sept. 11, 12	Milwaukee, Wis.
Sept. 10-12	Portsmouth, N.H.

125th ANNUAL CONVENTION

June 26-30	Dallas, Tex.

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Dec. 4-7	Philadelphia, Pa.

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OPENING SESSION

Dr. Max Parrott (r), AMA President, renewed friendship with Dr. E. Vernon Stabler, Sr., MASA President, prior to Orientation Program.





On behalf of the City of Montgomery, Mayor Jim Robinson received the Dr. L. L. Hill plaque from MASA.



Medical Practice and Socio-Economics Reference Committee (l-r): Drs. P. D. Everest, Chairman, R. J. Henderson, Jr.,; and J. W. Boggess were joined by Dr. P. B. Jones, Jr., (not pictured).



Members of the Legal-Legislative Reference Committee included (seated at table, l to r): Drs. Lloyd Warr, (Alternate); W. P. Coates; R. N. Wesley, Chairman; W. E. Allison; Bobby LeMay; and R. H. Story (not pictured).



ORIENTATION

Special guest speaker for Orientation was Dr. Ted Cooper, Assistant Secretary for Health, HEW.

REFERENCE COMMITTEES

Medical Education Reference Committee Members (l-r): Drs. J. F. Mracek; Ellann McCrory, Chairman; M. J. Fitz-Gerald; H. V. Herndon; and H. C. Mullins heard considerable testimony concerning MASA's cme membership requirement. Recommendation for acceptance was approved.





Organization and Administration Reference Committee Members included (l to r): Drs. E. V. Stabler, Jr.; B. D. McAnnally; J. E. Poteet, Chairman; J. M. Akin; and J. F. Stanley.

1976 Annual Session Album

PRESIDENT'S PRAYER BREAKFAST



The President's Prayer Breakfast attracted one of its largest audiences. Responsible for its success were (l to r) Dr. A. A. Stamler, guest speaker Rev. Ben Smith, UAB Medical Center, and Dr. Stabler.

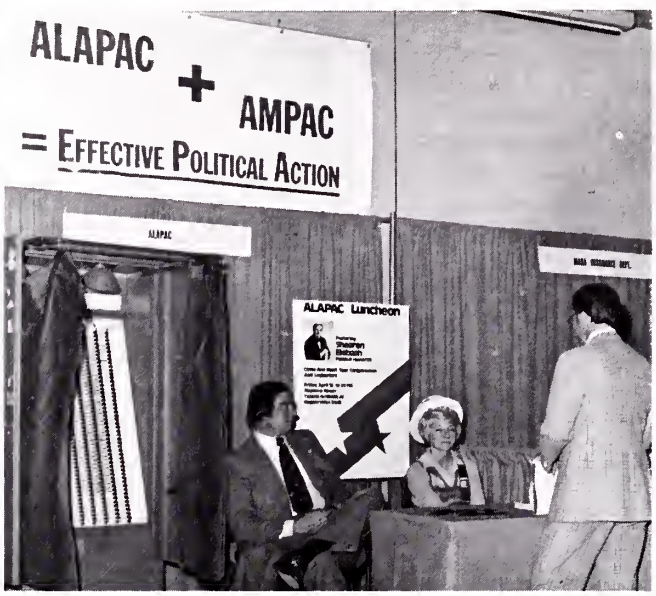


Dr. Harwell Wilson (r), Chairman, Department of Surgery, University of Tennessee, was one of the several outstanding guest lecturers during the Scientific Session. He was introduced by Dr. Stabler.

SCIENTIFIC SESSION



Several state political notables, including Lt. Gov. Beasley (standing), attended this year's Alapac Luncheon. Seated to Beasley's right is the new Alapac Chairman Dr. Felix Tankersley.



ALAPAC

The ALAPAC/ AMPAC booth in the exhibit hall emphasized the need for more Alabama physicians to join ALAPAC and become involved.



Naturally, politics was the center of conversation during the Alapac Luncheon on Friday. Dr. Kenneth Yohn (c) extended a hand of welcome to State Sen. Bert Bank (l) and Lt. Gov. Beasley.



Honored with a Distinguished Service Plaque for his work as Alapac Chairman (1969-1975), Dr. Grover Murchison (standing right) receives the plaque from Dr. Charles Herlihy.

AWARDS DINNER

Dr. Leon Hamrick, Chairman, Board of Censors, presented Distinguished Service Awards to former members of the Board: (l to r) Drs. Edgar Givhan; Robert Parker; F. M. Phillippi, Jr.; H. G. Hodo, Jr.; L. L. Hill and J. O. Finney.





Recipient of the 1976 Samuel Buford Word Award from Dr. Herlihy (r), awards presenter, was Dr. Dewey A. White, Jr.

Dr. Aubrey L. Sewell (r) won the CB radio at the drawing for door prizes at the close of the Awards Dinner Friday Night. Dr. W. A. Marshall (not shown) won a portable TV set at a drawing held earlier in the day at the Bristol Labs booth.





Mr. Ray Bohl (l), Employers Insurance of Wausau, presents an Accutron watch to winner, Dr. A. L. Tucker.



Dr. E. L. Strandell (r) accepts two tickets from Dr. Stabler for his Alaskan cruise, which he won during the Awards Dinner.



Dr. John W. Davis, Jr., proudly displays his Distinguished Service Award

BUSINESS SESSION



Installation of new MASA officers by Dr. Stabler.

The presidential gavel passes from Dr. Stabler (r) to Dr. William T. Wright as President-Elect Dr. J. B. M. Rice, Jr. looks on during the Saturday business meeting.





Caught by the camera reviewing the order of business prior to the meeting of the College of Counsellors and House of Delegates were (l to r) Drs. Paul Burleson, Julius Michaelson and William White.



Dr. Hamrick (r) presented retiring Censors Drs. Garber Galbraith, Strandell nd Burleson (l) with)istinguished Service aques at the close of the regular business meeting.



Dr. John Chenault, Life Counsellor from Morgan County, reported that he enjoyed a much more "relaxed" annual meeting this year than in previous years.

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Colonial Medicine

HIGHLIGHTS OF 200 YEARS OF AMERICAN MEDICINE

MEDICAL care in the American colonies in 1776 was a crude and primitive affair compared to today's highly developed health care system.

In fact, for many Americans, there just weren't any doctors at all, and home medicine was the only answer. Most of the nation lived in remote rural areas. The crisis was over—the patient either survived or died—before the doctor could arrive on horseback.

And if you did find a doctor, his knowledge and tools and medicines were scant indeed compared to today's sophisticated and scientific medicine.

THE DOCTOR likely had never attended medical school and had no license to practice medicine. He didn't really know what caused most diseases and he didn't really know how to treat them.

The doctor's answer to disease in those days was likely to be to open a vein in the wrist and draw off a pint or two of blood...or a dose with a very strong emetic to induce vomiting...or a strong purgative to cleanse the bowels. Often the treatment did more harm than good.

The doctor didn't know about germs and how to prevent infection. Pasteur and Lister were still far in the future. He did know that innoculation against smallpox gave protection, and the Continental Army was well protected against this scourge.

The doctor had—sometimes—a few items to relieve pain—alcohol, opium, laudanum. He had no penicillin, no insulin, no vaccines, no anesthetics.

There were about as many doctors for the population two hundred years ago as there are today—one to 600. At the time of the Revolution, there were around 3,500 fairly legitimate medical practitioners in the thirteen colonies. Less than four hundred of these possessed medical degrees. Most had been trained under the apprentice system. A very few were products of European medical schools, or one of the two new American schools.

IN COLONIAL times, the aspiring physician apprenticed himself to an older doctor, served several years, and received from his mentor a certificate certifying his competence to practice medicine.

Surgery consisted largely of amputations of injured arms and legs. Many of the patients died of infection and loss of blood. The doctor had to get by without most of today's common medical tools—clinical thermometer, stethoscope, hypodermic syringe.

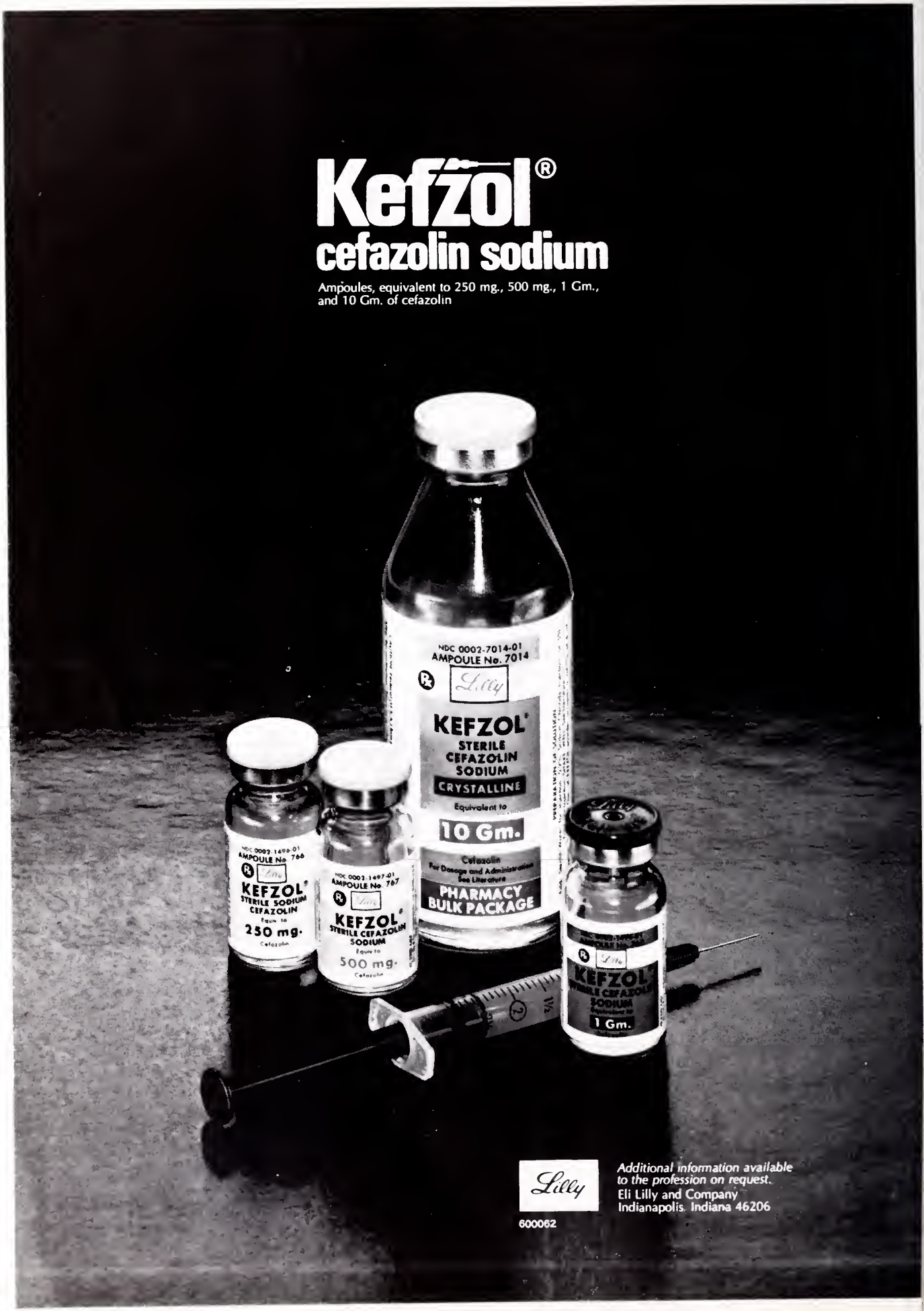
Colonial physicians used a variety of drugs when they could get them, such as "Jesuit's Bark," (quinine) for fevers, and they drew heavily on the native plants and shrubs. Knowledge of therapeutic plants, gained through generations of experimentation, was considerable, and could aid in relieving pain and in curing some diseases.

Fevers, smallpox and dysentery caused much of the illness. Life expectancy was short and the degenerative diseases of advancing years were a minor health problem for most Americans in 1776. Dirt and poorly cooked food and drink made dysentery a highly common health problem in the Continental Army. Influenza and pneumonia were common, thriving on poor ventilation, crowded conditions, dirt and poor diet.

Despite their handicaps, American doctors did the best they could and their very presence was a great help to many sick individuals. Several doctors were among the signers of the Declaration of Independence: Josiah Bartlett of New Hampshire; Lyman Hall of Georgia; Benjamin Rush of Pennsylvania; Matthew Thornton of New Hampshire, and Oliver Wolcott of Connecticut. Others were members of the Continental or United States Congresses. ■

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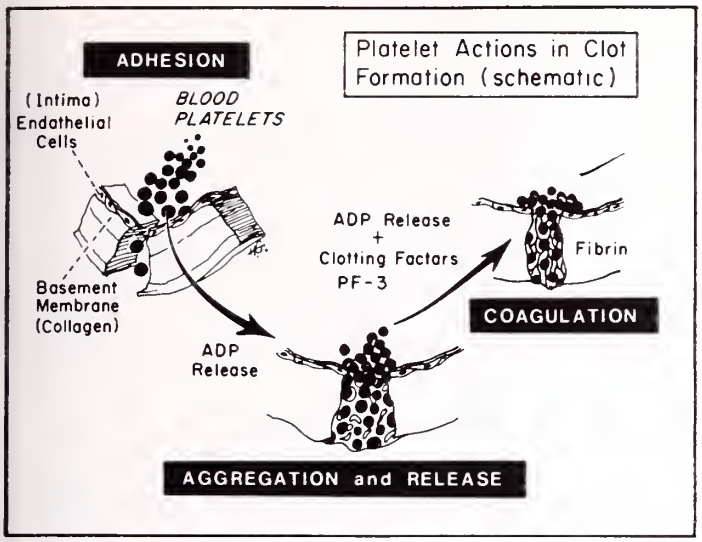


FIGURE 1

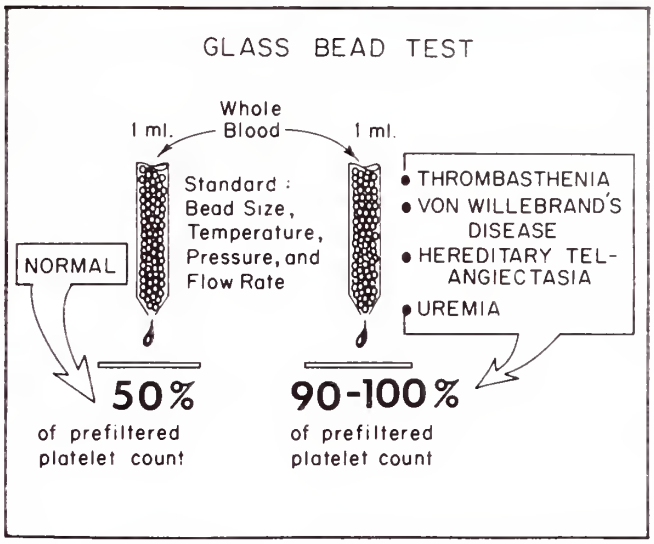


FIGURE 2

Platelets And Drugs

Thomas W. Sheehy, M.D.*

Platelets are called the "keystone of hemostasis" and they provide man's first line of defense against bleeding. Lately, voluminous literature has evolved about drugs that impair platelet activity and the potential or actual therapeutic use of these drugs in treatment of stroke, myocardial infarction, angina, and other diseases.

Platelets play a unique role in hemostasis through formation of a platelet plug or seal that staunches bleeding until the intrinsic coagulation system provides a more permanent clot. There are several key steps in the formation of a platelet plug. These include platelet adhesiveness, platelet aggregation, platelet release, and consolidation. (Fig. 1).[1,2]

Platelet adhesion consists of the attachment of platelets to non-platelet surfaces.[3] This phenomenon occurs with vascular injury. In experimental wounds, platelets adhere rapidly to exposed collagen fibers or to the endothelial basement membrane. With adherence, certain structural and chemical changes occur in platelets, including swelling and release of cytoplasmic constituents, such as adenosine diphosphate (ADP).[4] The exact cause for platelet adhesion is still uncertain. The two most likely possibilities are enzymatic changes on the platelet surface or the development of electrical charge differences between platelets and surrounding surfaces.[5]

Platelet adhesion can be monitored *in vivo* by performing serial platelet counts on blood obtained from an actively bleeding standardized laceration.

In vitro, the adhesion of platelets to glass (glass bead test) is taken as a parameter of platelet adhesion. In this test, whole blood is passed through a column of glass beads of similar size and shape under standardized conditions of pressure, flow rate, and temperature (Fig. 2). The platelet count of serial samples of filtered blood is compared with circulating platelet count. With normal adhesiveness, about 50% of platelets are trapped within the column of beads.[6] Platelet adhesion is markedly reduced in thrombasthenia (Glanzmann's disease), von Willibrand's disease, uremia, and hereditary telangiectasia.[7] In these diseases, few platelets are trapped by the glass beads, hence the platelet count of the filtrate is similar to that of prefiltered whole blood (Fig. 2). Experimental evidence suggests that platelet adhesion *in vivo* may be similar to platelet adhesion to glass.

Platelet Aggregation. As shown schematically (Fig. 1), platelet aggregation follows platelet adhesion. ADP is responsible for aggregation. The ADP released from injured tissue initiates platelet aggregation but aggregation is potentiated mainly by endogenous ADP released from the injured platelets.

Currently, a turbidometric method is used to study platelet aggregation.[7] Blood collected in sodium citrate is centrifuged at 1500 rpm. The supernatant platelet rich plasma (PRP) is removed and an aliquot is placed into a cuvette which is introduced into the path of the light beam. The platelet mass is stined by means of a magnet and light transmitted through the suspension is continuously recorded. The test is performed at 37 degrees C. (Fig. 3).

When an aggregating agent is added to a PRP suspension, the formation of increasingly larger platelet aggregates decrease turbidity and increase light transmission. The degree of aggregation is expressed as per cent change in

***Professor of Medicine, Department of Medicine, University of Alabama School of Medicine, and Chief, Medical Service, Veterans Administration Hospital, Birmingham, Alabama 35233.**

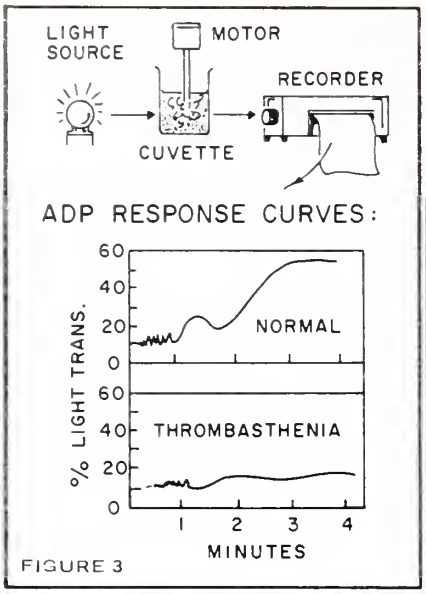
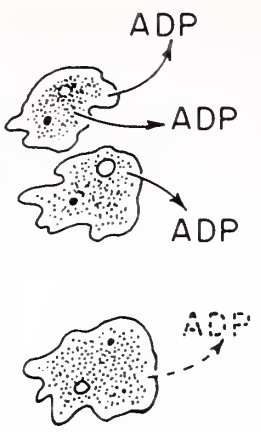


FIGURE 3



INCREASE ADP RELEASE:

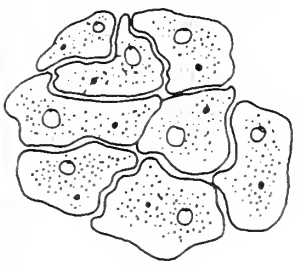
Exposed collagen
Basement membrane
Thrombin
Epinephrine, Fatty acid,
Antigen-antibody complexes

IMPAIR ADP RELEASE:

Aspirin, Phenylbutazone,
Sulfinpyrazone
Dipyridamole
Prostaglandin (PG-1)

FIGURE 4

Platelet Aggregation



INCREASE AGGREGATION:

Serotonin, Epinephrine,
Ristocetin, Estrogens,
Carbon monoxide, ADP,
Thrombin, Collagen

BLOCK AGGREGATION:

Aspirin, Phenylbutazone,
Indomethacin, Diuretics,
Tricyclic compounds,
Sulfinpyrazone,
Dipyridamole,
Chlorpromazine,
Antihistamines

FIGURE 5

ACTION SITES OF PLATELET AGGREGATORS - INHIBITORS

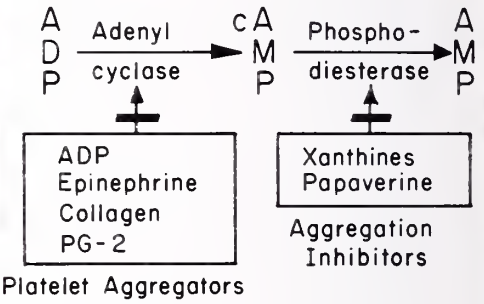


FIGURE 6

light transmittance or optical density over a fixed interval of time.

In an aggregometer, low concentrations of ADP will induce *reversible* platelet aggregation, or "primary aggregation." In contrast, high concentrations cause a second wave of aggregation which is irreversible.[8] This second wave is triggered *in vivo* by ADP released from platelets within the aggregate itself. With even higher concentrations of ADP, the primary and secondary aggregation waves merge forming a single curve (Fig. 3). Collagen or suspensions of connective tissue normally yield only a single aggregation wave when they are added to PRP in the aggregometer. The second wave of aggregation mentioned above is absent when platelets from patients with platelet ADP deficiency or aspirin-induced blockade are studied with the aggregometer.

Like the coagulation mechanism, ADP induced platelet aggregation requires calcium ions, fibrinogen, and one other plasma protein co-factor. The exact mechanism whereby ADP induces platelet aggregation is not understood. Presumably, ADP acts on the platelet membrane to activate the contractile protein, thrombasthenin, which, in turn, alters the platelet shape. Normally, thrombasthenin is contracted. ADP causes it to relax and thereby alters platelet shape.[9]

Platelet release. When platelets are stimulated by collagen, about 50% of endogenous ADP stored in the highly specific electron "dense" storage granules is released into the surrounding area (Fig. 4). This "release reaction" occurs rapidly, involves the expenditure of considerable energy, and does not effect cytoplasmic or mitochrondrial enzymes.[9] During this reaction, fibrinogen, calcium ions, ATP, vasoactive substances, potassium ions, enzymes, platelet factor-3 (PF-3), and other substances are released.[10] Some of these, such as PF-3, have physiologic roles but the actions of others are not known. Some increase capillary permeability; others may cause tissue injury, such as the vasculitis noted where platelet aggregates form on the vessel wall or the occasional endothelial destruction found beneath platelet aggregates.

Release disorders. In 1967, Weiss reported a group of unrelated patients with a bleeding disorder characterized by a prolonged bleeding time and a decreased platelet factor-3 (PF-3) availability. Later, it was found that PF-3 was not released properly in this disorder because the platelets

failed to release either ADP or PF-3 adequately in the presence of collagen.[7]

In an aggregometer, platelets from patients with "release disorders" respond initially to epinephrine and exogenous ADP, i.e., there is an initial wave of aggregation but the second wave is blunted, decreased, or absent as the result of platelet failure to release endogenous ADP.

Two types of "release defects" are known. In the first, "storage pool disease," there is a deficiency of ADP in the dense granules of the platelet cytoplasm. In the second, platelet stores of ADP are adequate but ADP is not released upon platelet contact with collagen or basement membrane.[11]

Recently, a morphometric technic has been devised for studying these and other platelet disorders.[12] In this method, titrated whole blood is perfused through a flow chamber containing segments of rabbit-aorta previously denuded of epithelium by a balloon catheter. After perfusion for a specified period of time, the blood vessel segments are studied by light and electron microscopy to determine the interaction between platelets and the subendothelium. Utilizing this method, Weiss et al found platelet to platelet interaction (aggregation) was markedly impaired in storage pool disease, thrombasthenia and normal persons who had ingested aspirin.[13] In contrast, platelet adhesion to the subendothelium was the primary defect in von Willibrand's disease and the Bernard-Soulier (giant platelet) syndrome.

Morphologic changes. Once ADP is released *in vitro,* rapid platelet transformation occurs. Disc shaped platelets change into spheres with numerous surface pseudopods. Shape change occurs at the time of the release reaction and are accompanied by a clustering of organelles into the center of the platelet. The latter is attributed to contraction of the platelet's marginal microtubules, which tighten like a lasso about the periphery forcing cytoplasmic granules and other substances towards the platelet center or from the platelet.[14] Surface pseudopods stabilize the platelet aggregate and thus facilitate adhesion.

Consolidation. Platelet factor-3 (PF-3), made available during the release action, is essential to both intrinsic coagulation and to consolidation of the platelet plug. PF-3 plays a key role in the interaction between factor IXa and factor VIII which results in activation of factor X, and in the interaction between factor Xa and factor V which leads to formation of prothrombinase and eventually thrombin.

In vivo, platelet aggregates induced by ADP break up quickly unless they are stabilized by thrombin. This key enzyme has a dual role. Thrombin polymerizes fibrin while serving to further induce platelet release of ADP. Without fibrin, any vessel wall thrombus, composed largely of ADP aggregated platelets, can be expected to disaggregate under the rheological stress of flowing blood. As fibrin polymerizes, platelets adhere to it and the platelet aggregate is consolidated, in turn providing a site for further activation of clotting factors leading to thrombin generation.

AGENTS EFFECTING PLATELET ACTIONS

Numerous drugs and certain enzymes effect platelet aggregation both *in vitro* and *in vivo.*[10] Adrenalin, serotonin, ristocetin, estrogens, nicotine, carbon monoxide, and several forms of vasopressins are potent aggregating agents (Figs. 4 & 5). Immunoglobulins, antigen-antibody complexes, unconjugated bilirubin, viruses, bacterial toxins, snake venom, phytohemagluttinin also impair platelet actions.[10]

The antibiotic, ristocetin, was withdrawn from clinical use because of its tendency to induce thrombocytopenia.[10] Since then, ristocetin has become a useful clinical tool for diagnosis of von Willibrand's disease and the Bernard Soulier syndrome. Ristocetin fails to induce platelet aggregation in these disorders, whereas platelet aggregation occurs in response to ADP, collagen, or thrombin.[7, 10]

Estrogens, too, increase platelet adhesiveness and enhance platelet response to platelet aggregating agents. These effects may be linked to the increased incidence of thromboembolism observed in women taking estrogens. The daily administration of stilbesterol has also been associated with an increased incidence of arterial thrombosis in patients with carcinoma of the prostrate.

Platelet adhesion and aggregation are related to platelet cyclic AMP. *In vitro,* cyclic AMP inhibits ADP induced platelet aggregation. Ordinarily, the levels of platelet cyclic AMP are maintained at a relatively constant level by two enzymes, adenyl cyclase, which catalyzes the synthesis of ADP to cyclic AMP, and phosphodiesterase, which degrades cyclic AMP to AMP (Fig. 6).[16, 17]

Epinephrine, collagen, and PG-2 induce platelet aggregation by decreasing platelet levels of cyclic AMP, probably through interference with adenyl cyclase. Inhibitors of platelet aggregation, such as the xanthines and papaverines, are thought to increase platelet cyclic AMP levels, thereby inhibiting the action of phosphodiesterase.[18]

DRUGS ALTERING PLATELET FUNCTION

Drugs impairing platelet function do so by (1) inhibiting platelet adherence to surfaces; (2) inhibiting the platelet release action; (3) inhibiting ADP-induced aggregation; or (4) inhibiting the interaction between platelets and components of the coagulation sequence. Some drugs interfere with several of these steps.

Nonsteroidal anti-inflammatory drugs, such as aspirin, phenylbutazone, indomethacin, sulfinpyrazone, and chloroquine readily inhibit ADP-induced platelet aggregation, the release reaction caused by ADP, and platelet adherence to collagen *in vitro.* (Figs. 4 & 5).[10, 20]

Aspirin differs from the other drugs in that it acetylates protein. This causes an irreversible platelet change on both platelet aggregation and ADP release that lasts from 4 - 7 days even though the half-life of aspirin is only 90 minutes.

Sulfinpyrazone is the only drug in this group that prolongs platelet survival in patients with prosthetic heart valves who have shortened platelet survival times.[21]

Dipyridamole and other pyrimido-pyrimidine drugs inhibit both primary and secondary ADP and collagen-induced platelet aggregation and decrease platelet retention by glass beads. These drugs inhibit platelet phosphodiesterase. Dipyridamole also prolongs platelet survival in patients with prosthetic heart valves.

The tricyclic anti-depressants, such as imipramine, desipramine, amitriptyline, and nortriptyline, **antipsychotic drugs,** such as chloropromazine, **antihistamines,** like pro-

methazine, and **diuretics**, such as furosemide, also inhibit ADP-induced aggregations.[10]

Prostaglindin E_1 inhibits aggregation by increasing cyclic AMP. It is one of the most potent inhibitors of primary ADP-induced aggregation and also inhibits platelet adherence to collagen and prevents ADP-induced shape changes.

The exact role of the anti-inflammatory drugs, the tricyclic compounds, and the antipsychotic drugs, on platelet function *in vivo* is not clear. Certainly, millions of people tolerate the drugs well. Nonetheless, a number of patients taking combinations of these drugs have developed a prolonged bleeding time. Occasionally, some have bled excessively after surgical procedures. Patients taking Coumadin or with a bleeding disorder should never use aspirin as an analgesic. Interestingly, about 40 per cent of blood donors have a measurable level of aspirin in their plasma.

THERAPEUTIC USES

Arterial thromboembolism. Repeated attempts have been made to use drugs which block platelet aggregation therapeutically because anti-coagulant drugs have not proven highly successful in preventing thromboembolism in patients with prosthetic heart valves or with rheumatic valvular disease. Moreover, the risk of hemorrhage accompanying use of anticoagulants almost equals the risk of embolism. Wiley and Genton found platelet survival decreased in 16 patients with prosthetic mitral valves (Starr-Edwards Series 6000, 6120, and Kay-Shiley disc valves).[22] Platelet survival was also found to be decreased in patients with Starr-Edwards prosthetic aortic valves, Series 1000, 1200, 1260, 2300, and 2320, and in patients with rheumatic mitral stenosis.[23]

Sulfinpyrazone increased the platelet survival of 7 of 9 patients in Weily and Genton's study and returned platelet survival time to normal in five other patients. Dipyridamole can also normalize platelet survival in patients with prosthetic valves, while a combination of dipyrimadole therapy plus Warfarin has reportedly decreased thrombotic complications in patients with prosthetic valves.[21,23] Weily et al believes platelet survival time correlates with the rate of thromboembolism in patients with both prosthetic and homografic mitral and aortic valves.[24,25]

In their studies, platelet survival appeared to be decreased in the patients with recurrent thromboembolism despite anticoagulant therapy but was normal in patients responsive to anticoagulants. Dramatic improvement occurred in the former group when they were treated with sulfinpyrazone (800 mg/day) and their platelet survival time returned to normal.[23,25]

Transient Ischemic Attacks: Blakely and Gent reported that sulfinpyrazone led to a significant reduction in death from vascular causes.[27] Both aspirin and dipyridamole have been reported to be effective in reducing the attacks of amaurosis fugax.[30, 31] At our institution aspirin appears to be effective in reducing transient ischemic attacks.[31] Two large multicenter studies are currently in progress to assess the effects of platelet function suppressing drugs in patients with cerebrovascular disease.

Venous Thromboembolism: None of the platelet drugs, including aspirin appears to be effective in prevention of venous thromboembolism despite some contradictory claims.[33] Recent and more extensive studies have shown aspirin is no better than a placebo in preventing postoperative venous thromboembolism.[34]

Myocardial Infarction: Antiplatelet drugs have been and continue to be studied in patients with coronary artery disease. Cobbs et al found only 4 per cent of 191 patients with rheumatoid arthritis, who took large doses of aspirin daily, died from myocardial infarction in contrast with 31 per cent deaths in the general population.[26] Blakely and Gent found a significant reduction of deaths from myocardial infarction among 281 elderly males treated randomly with placebo or sulfinpyrazone.[27] The Boston Collaborative Drug Surveillance Group suggested that aspirin might protect against myocardial infarction but the evidence was far from conclusive. In this retrospective study, the risk of developing myocardial infarction was less among patients taking aspirin regularly than among those who did not take aspirin regularly.[28] Elwood et al reported that in patients who suffered a myocardial infarction, the death rate among those taking aspirin regularly was 25 per cent lower after one year than in similar patients who did not ingest the drug regularly.[29] Currently, the role of aspirin in prevention of myocardial infarction is not clear and it is under investigation in multicenter trials in Great Britian and the United States.

DRUG-INDUCED THROMBOCYTOPENIA

Childhood thrombocytopenia is caused primarily by infections, while drugs are usually responsible for thrombocytopenia in the adult. Thrombocytopenia is readily diagnosed by a low platelet count and the first therapeutic step, if drug-induced thrombocytopenia is suspected, is to stop all medications. Usually, this measure is followed by quick recovery, with platelets reaching normal levels after 1 to 2 weeks.

The main difficulty with drug-induced thrombocytopenia lies in identifying the drug responsible for thrombocytopenia and its mechanism of action. Patients with drug-induced thrombocytopenia usually develop bleeding gums and petechae but bleeding may be severe. Fortunately, intracranial hemorrhage is rare.

Re-exposure to an offering drug causes the platelet level to drop in less than one-half hour. An important but little known fact is that certain drugs may trigger acute thrombocytopenic purpura days or weeks after the drug has been discontinued. Gold salts, which are retained for long periods of time, may lead to development of purpura months after the last injection.

Etiology and Pathogenesis: In 1949, Ackroyd found that sedormid-induced thrombocytopenia resulted from a serological reaction between platelets, drug, and patient serum.[35] These three components lead to platelet agglutination. In this reaction, clot retraction was inhibited. Later, other drugs were shown to have a similar reaction with platelets. The resulting platelet-drug interaction was a loose reaction for dialysis of the mixture against saline resulted in removal of sedormid-antibody complex from the platelets. With removal of sedormid, the antibody was released from fixation to the platelets.

Drugs cause thrombocytopenia by two mechanisms, bone marrow suppression or immunological reaction.

Antineoplastic drugs, such as the aklylating agents can cause thrombocytopenia in any patient who takes a sufficient amount of them. If a drug produces thrombocytopenia in a large number of patients and antibodies cannot be detected against it, most likely toxic destruction is occurring. This is the mechanism proposed for alcohol and ristocetin-induced thrombocytopenia.

Others, such as the anticonvulsants, certain antibiotics or tranquilizers, cause occasional marrow aplasia or thrombocytopenia.[36]

More commonly, platelet destruction occurs through an immunological mechanism. Drugs causing selective thrombocytopenia of this type are numerous and include the antirheumatic drugs, phenylbutazone, indomethacin, gold salts, colchicine; hypoglycemic agents, tolbutamide, chlorpropamide, and miscellaneous drugs, such as chlorothiazide, quinacrine, acetazolamide, tripelennamine, and hydralazine.

Ackroyd's observation that agglutination and complement fixation could be demonstrated when a drug was added to a mixture of serum from a patients with drug-induced thrombocytopenia and normal platelet-rich plasma led to the immunologic theory of thrombocytopenia. He postulated the drug acted as a hapten and reacted with platelet protein to form antigen. Antibodies were then generated directly specifically against the antigenic drug platelet complex.

Shulman modified Ackroy's theory and proposed the so-called "innocent bystander" theory.[37] He believes the drug acting as a hapten combines with a plasma macromolecule to form an antigen; and specific antibody (usually IgG) generates against the drug-macromolecule. These antigen-antibody complexes bind loosely to specific sites on the platelet membrane causing injury and agglutination.

A number of *in vitro* tests are now available for detecting drug-induced platelet antibodies, including the following: (1) clot retraction inhibition; (2) PF-3 release; (3) alpha amino acide release; (4) serotonin uptake; (5) ^{57}Cr release; (6) agglutination; (7) complement fixation; (8) ^{131}I FAB-ANTI-FAB.

The **clot retraction inhibition test** consists of adding together plateletrich plasma, a dilution of the drug, patient serum, and calcium chloride. If antibodies are present, clot retraction occurs. When a control test is done and saline is substituted for the drug, no clot retraction takes place. Eliminating the offending drug prevents the antigen-antibody reaction from going to completion. This is a simple test but it is not very sensitive. The slide agglutination test is similar[32] (Fig. 7).

The **complement fixation test** involves use of patient serum, platelets, and the offending drug.[38] The test itself is one of the most sensitive and reliable methods available, provided that all appropriate controls are negative. It must also be borne in mind that HLA-incompatible platelets, fix complement when incubated with serum containing antibodies of the corresponding HLA antigen.

The simplified complement fixation test developed by Aster et al requires only one drop of each of the appropriate agents, i.e., serum complement, platelets, and reaction mixture.[39] Sensitized sheep cells are then added as an indicator and the results of the test are read visually (Fig. 8). This test is rapidly carried out and as many as 100 serum samples can be run per day. The test is probably

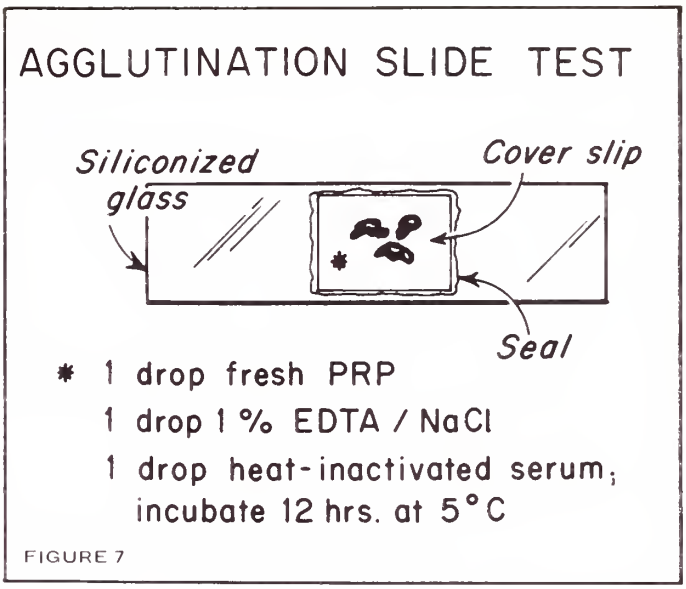


FIGURE 7

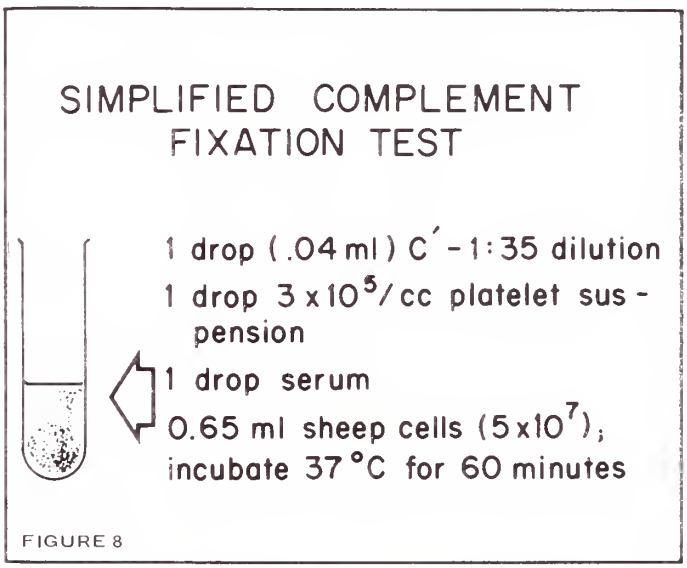


FIGURE 8

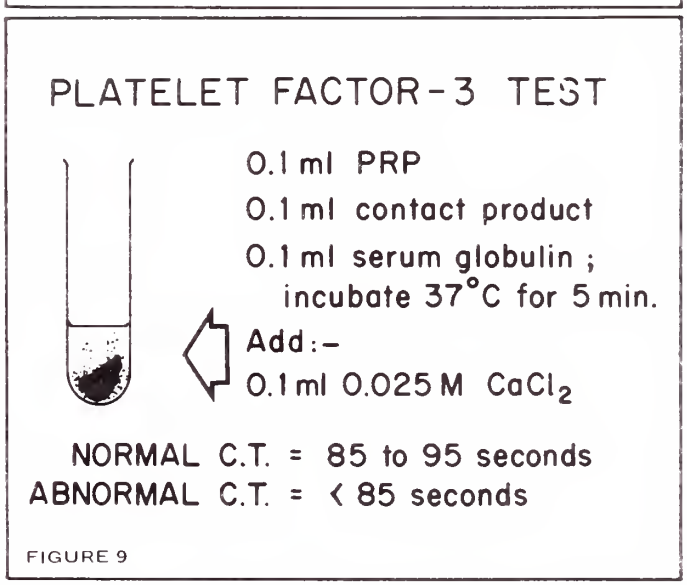


FIGURE 9

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superior to the agglutination test, anti-globulin consumption test, and the platelet-lysis test.

Platelet aggregometry is also useful for assessment of platlet antibodiies.[39] It is simple, quantitative, and relatively specific for detection of drug dependent isoimmune anti-platelet antibodies. It is particularly useful in searching for antibodies to quinidine, a drug which has been considered the most common cause of drug-induced thrombocytopenia. In the presence of antibody and quinidine, normal platelets undergo lysis. The resultant change is optical density, is readily detected using the aggregometer. In this test, the initial rate of lysis is a function of antibody titer and it is not dependent on the platelet count.

In vitro, quinidine produces platelet swelling and inhibits aggregation of platelets by ADP, epinephrine, and collagen. A study of this phenomenon by electron microscopy revealed that quinidine causes platelets to become spherical and swollen. However, the cytoplasmic granules of the platelet membranes remain intact. These changes are accompanied by a rise in the optical density which persists. When antibody containing serum and quinidine are mixed in the presence of platelet-rich plasma, the change is striking. There is an initial rise in optical density and then a fall. Microscopically, during this period of time, there is disruption of the cytoplasmic membrane with progressive lysis of cell architecture, culminating in total disruption of the platelets within 12 hours.

The platelet factor-3 test is simple to perform. Again, three ingredients are placed in a plastic tube.[40] These include 0.1 ml platelet rich plasma, 0.1 of "contact" product in normal saline solution, and 0.1 ml of globulin fraction of the test serum. The mixture is incubated at 37 degrees C for six minutes, followed by the addition of 0.1 ml of 0.025 M calcium chloride to initiate coagulation. (Fig. 9). The fibrin endpoint is observed and recorded in seconds. Tests are performed in duplicate. Globulin fractions of normal serum give a clotting time from 85 to 95 seconds. Results are abnormal if the clotting time is shortened by 10 seconds or more as compared with the simultaneously run control.

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Etidocaine (Duranest)
A New Long Acting Local Anesthetic
For Epidural Anesthesia

Hamdi A. Erdemir, M.D.,
Malcolm D. Middleton, M.D., and
Guenter Corssen, M.D.*

ETIDOCAINE	ONSETS				TWO	DURATION	
	SENSORY		MOTOR		SEGMENT		
Dose (mg)	INITIAL	COMPLETE	INITIAL	COMPLETE	REGRESSION	SENSORY	MOTOR
250 (1.0% 25ml) n=100	3±1.5	17±10.5	6±2.4	16±13.9	148±53	273±73	256±102
300 (1.5% 20ml) n=37	3±1.1	13±7.5	5±2.2	14±9.4	149±50	304±83	297±93
375 (1.5% 25ml) n=11	3±1.1	15±5.1	4±2.2	11±5.0	223±80	375±90	351±74

TABLE I

SUMMARY OF ANESTHETIC EVALUATION DATA

(X ± S.D.)

Etidocaine is a new anesthetic agent without undesirable or potentially dangerous side effects. It is chemically related to lidocaine but faster in onset and longer in duration of analgesic action than lidocaine or its congeners. The chemical name of Etidocaine is (+)-2-(N-ethylpropylamino-2-butyroxylidide) hydrochloride. The physical and chemical properties of Etidocaine differ significantly from those of lidocaine, particularly with respect to its enhanced lipid solubility and protein binding. Initial laboratory studies by Adams and Associates (1972) employing sciatic nerve blocks in the rat and intradermal wheal techniques in the guinea pig, have shown that Etidocaine has a rapid onset and long duration of analgesic action.

We investigated the clinical safety and effectiveness of Etidocaine as an epidural anesthetic in 200 clinical patients undergoing a variety of orthopedic, gynecologic and general surgical procedures for which the use of an epidural block appeared to be indicated.

In particular, attention was paid to precisely record the onset of sympathetic blockade, onset and duration of sensory and motor blockade and also monitor the time at which regression of the block began until complete restoration of sensory and motor functions.

METHOD AND SUBJECT SELECTION:

The following criteria were used in the selection of 200 patients participating in this study:

a. Adult males and females ranging in age from 21 to 80 years. Females with childbearing potential were excluded.
b. Surgical procedures performed involved the lower abdomen, pelvic area or lower libs.
c. Patients were free, by history, of sensitivity to local anesthetic agents of the amide type.
d. Patients did not show signs or symptoms of cardiac or peripheral vascular disorders.
e. None of the patients participated in other clinical studies involving evaluation of new drugs.
f. Patients were informed of the nature of the study and oral or written consent was obtained.

METHODS AND PROCEDURES:

1. Premedication – 75 mg of Meperidine combined with 0.4 mg of Atropine was administered intramuscularly 1 to 2 hours prior to the start of the epidural procedure.
2. The epidural space was approached with an 18 gauge Crawford epidural needle using loss of resistance technique through the L3-L4 interspace. In nine instances, one higher or one lower segment was used since the introduction of the needle in the L3-L4 interspace proved impossible. A total of 20 ml of Etidocaine was injected into the epidural space in the following manner: A test dose of 3 ml was administered within 30 seconds. After an interval of 30 to 60 seconds, the additional 17 ml were injected over a 60 second period, utilizing a Crawford 18 gauge needle.
3. If supplementation of the epidural block was required, the following procedure was followed: Valium (5 mg I.M.) was employed if the patient showed signs of apprehension, an ultrashort acting barbiturate, Surital or Pentothal (50 to 100 mg I.V.) was administered when sedation was required. Nitrous oxide-oxygen mixtures were administered in 37 instances to produce unconsciousness.
4. Measurements: Subsequent to the epidural injection;
   a. Onset of sympathetic block, as indicated by tempera-

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TABLE II
Spread of Analgesia and Quality of Anesthesia

Etidocaine Dose (mg)	Highest Level Median and Range	% Satisfactory		% Receiving Supplementation
		Sensory	Motor	
250 (1.0%, 25 ml)	T_5 C_3 to T_{12}	86	93	61
300 (1.5%, 20 ml)	T_5 C_4 to T_{12}	97	100	16
375 (1.5%, 25 ml)	T_6 T_2 to T_{10}	91	100	45

Agent	Sensory Analgesia		Motor Blockade		Supplementation	
	Sat.	Unsat.	Sat.	Unsat.	No	Yes
Etidocaine	24	0	14	0	20	4
Xylocaine	22	2	7	2	17	7
Exact p or X^2	0.2447 ns		0.1423 ns		0.4717 ns	

Values in body of Table are numbers of patients.

TABLE III
DOUBLE BLIND STUDY–Tabulations of Satisfactory And Unsatisfactory Sensory and Motor Blocks and Number of Patients Requiring Supplementation.

ture rise of the extremities was recorded by employing skin electrodes anchored between toes.

b. Onset of sensory blockade was determined in one minute intervals using the needle prick method, until the most upper level of analgesia was established.

c. Motor blockade was recorded by observing the degree of motor function in the lower limbs every five minutes, beginning at the completion of the epidural injection through post-operative period until the patient recovered from motor blockade. Motor blockade was classified as follows:

I. Onset of motor blockade – the patient is still able to flex knees but is unable to move legs freely.
II. Complete motor blockade – the patient is unable to flex knee or ankle.
III. Recovery from motor blockade–patient is able to flex knee easily.

d. During the postoperative period, onset of regression was recorded, again using the needle prick method and the time recorded for regression of two segments and return to T-10 level. The regression checking was continued over 15 minute intervals until normal sensation had returned completely.

5. Heart rate and blood pressure were monitored prior to and at five minute intervals following the epidural injection, and continued throughout the surgical procedure and postanesthetic recovery until normal sensation had returned.
6. The quality of surgical analgesia was judged as adequate or inadequate. Notes were made concerning necessary supplementation of conventional hyponotics or anesthetics, pain experienced by the patient on incision, sensation experienced by the patient on visceral manipulation, adequacy of muscle relaxation.
7. Any undesirable side effects in response to the local anesthetic were also recorded.

The 200 participating patients were divided into three parts:

(1) 100 patients received 1% etidocaine with epinephrine 1/200,000 with the investigator knowing about the drug and its concentration used.

(2) 50 patients receiving 1.5% etidocaine with epinephrine 1/200,000 with the investigator knowing about the type of drug and the concentration used.

(3) 50 patients received 25 milliliters of either 2% lidocaine with epinephrine 1/200,000 or 1% etidocaine with epinephrine 1/200,000 under double blind conditions.

TABLE IV–ONSETS & DURATIONS OF SENSORY ANALGESIA & MOTOR BLOCKADE

Agent	Onset					Highest Dermatomal Level	Duration		
	Sympathetic	Sensory Initial	Sensory Complete	Motor Initial	Motor Complete		Regression of 2 Seg.	Sensory	Motor
Etidocaine 1% (250 mg)	4 ± 3	4 ± 3	16 ± 6	7 ± 4	18 ± 10	T5 T10-T2	136 ± 53	291 ± 70	262 ± 68
n	20	24	24	24	23	24	22	23	24
Xylocaine 2% (500 mg)	3.7 ± 2.5	5 ± 2	16 ± 7	9 ± 6	20 ± 10	T6 T9-C8	136 ± 47	181 ± 68	156 ± 70
n	20	24	24	24	19		23	24	23
t	0.6887	0.3802	0.1716	1.5826	0.6628	Z = 0.88	0.0052	5.4236	5.2510
p	ns	ns	ns	ns	ns	ns	ns	p < 0.01	p < 0.01

Onsets and durations are as minutes and are given as means ± S.D.'s Highest dematomal level given as median and range

RESULTS

Sympathetic blockade occurred within four minutes. Sensory analgesia appeared within five minutes while complete sensory analgesia took up to 20 minutes to become established.

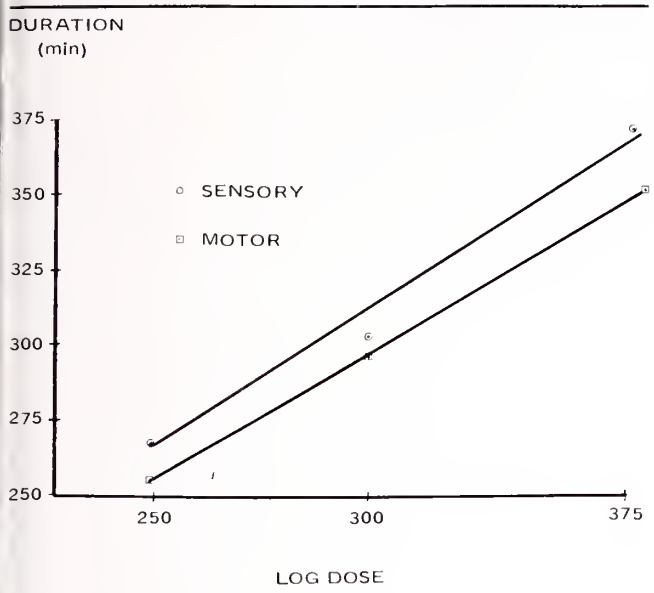


FIGURE 1—Relationship Between Log Total Dose And Duration For Duranest In Peridural Anesthesia

Total duration of analgesia varied from 5 - 7 hours. Motor blockade, as a rule, began within five minutes and was complete in 15 minutes. The duration of the motor blockade appeared dose dependant lasting from 4 - 6 hours.

The initial and complete onset of sympathetic and sensory analgesia as well as motor blockade was considerably more rapid than observed with other local anesthetics.

There was virtual absence of localized or systemic toxic reactions, in particular, with regard to neurologic sequelae, and cardiovascular disturbances.

Specifically, no methemoglobinemia or any other pathologic changes in organ systems were encountered.

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EMERGENCY MEDICINE



Keynote Address by Irving J. Cohen, Editor, EMERGENCY MEDICINE magazine, at the First Annual Clinical Conference on Emergency Medicine, February 13-14, 1976, in Birmingham, sponsored by the Alabama Chapter of the American College of Emergency Physicians.

"THIS CONFERENCE brings together all the people who play an essential part in providing effective emergency care. Among you are paramedics, physicians, nurses, EMTs, and students as well as members of hospital and community emergency medical services committees. In putting the conference together in the way they have, your program planners are underscoring the fact that good EMS of necessity is a *team endeavor.*

"It's pretty old-fashioned to think of emergency care as happening only in a hospital emergency room. Experience has taught that for maximum efficacy it has to start at the moment of injury or acute illness, wherever and whenever it may strike, and continue right through to definitive care.

"When we discuss emergency care in the U.S., just how big a problem are we talking about? Sixty-five million people come to hospital emergency departments each year, but only about 15% are sick enough to require medical attention within one to three hours if complications are to be avoided. Five per cent of emergency patients actually have life-threatening conditions, usually because of trauma, heart attacks, poisoning, burns, and drug overdoses, or because they're newborns in big trouble.

"CORONARY CATASTROPHES kill nearly 700,000 people a year. Equally mind-boggling is the toll from trauma. About 120,000 people die of injuries in a typical year and another 420,000 are permanently disabled. More than two million of the 60 million Americans injured every year end up in the hospital. In fact, trauma victims take up more hospital beds than all the babies who are born and all the patients with heart disease, and four times the number occupied by cancer patients.

"In both acute heart disease and trauma, the prehospital phase of emergency care has enormous influence not only on the patient's survival but on the complications and disability he will suffer. But even in a group such as this, made up of people who are 'in the business,' there is a tendency to think of prehospital care as beginning with the arrival of the ambulance. But that is not—or rather, it should not be—the first point in the emergency care continuum. To be most effective, care should start much sooner.

"Specialists in treating injuries know very well that the care a patient receives before he gets to the hospital is often more important to the outcome than the care he receives after he is admitted. Yet, the first one to come to the victim's aid, long before the ambulance arrives, is usually a well-meaning but totally untrained friend or neighbor.

"THE POINT I'm driving toward is that more has to be done in *pre*-prehospital care, that a serious effort has to be made in all EMS programs to train the real first responder, usually a member of the general public. EMS planners must make a much greater effort to give ordinary citizens basic training in life support and protection of the victim.

We've all been appalled by accounts of the boy who fell out of a tree and was permanently paralyzed because he was picked up and jack-knifed by a parent or neighbor. Or of the mother who panicked when she saw blood gushing from her little girl's slashed arm, sped to the hospital at 60 mph and crashed on the way, leaving two people dead instead of only one injured, when the bleeding could have been controlled and the panic prevented with a simple

pressure dressing. Or of the young man with facial injuries, who drowned in his own blood because no one at the scene rolled him from his back to his side when he began choking.

"A COUPLE OF MONTHS AGO a bomb exploded at LaGuardia Airport in New York, killing a dozen people. But they didn't all have to die, according to the physicians who cared for the blast victims. One death—from a scalp laceration—almost surely could have been prevented if the person who found the victim had known anything about emergency care. A few minutes after the blast, before any ambulances could arrive, the man was picked up, put into a taxicab, and rushed to the nearest hospital. Unfortunately, he was slumped with his head down and in the time it took to get from the airport to the hospital, he bled out and died. The physicians who reviewed the case said that a few 4x4s, direct pressure, and appropriate positioning probably would have saved the man's life.

"The next point in the emergency care continuum is the more traditional prehospital phase—namely, the ambulance. The days of 'death in a ditch' when hearse operators fought over the bodies—living or dead—of auto-accident victims are only a memory now. Vehicle design and equipment and communications have been improved immeasurably, but there is still no substitute for the trained eye and the trained hand at the scene of an emergency. Good equipment is important but what's done with it is critical.

"Despite the known value of eyeball observation and on-the-scene experience, the in-hospital members of the emergency care team don't always take full advantage of what trained ambulance crews can do. For example, ambulance personnel are encouraged to monitor and report the vital signs of accident victims, but physicians often show little interest in the crew's observations about the accident itself and the setting in which the victim was found. This kind of information can often help the doctors figure out which specific injuries to look for.

"COLLECTING INFORMATION at the scene is one thing, but ER physicians and nurses don't always ask the ambulance crew for it. Even data on vitals and time of recording them are not infrequently overlooked or ignored. Remember, Doctor, or Nurse, that the ambulance crew is your eyes and ears at the scene and what they see and hear can be extremely valuable in diagnosis and treatment. And remember, EMT, that the ER people may forget to ask, so don't be shy about volunteering the information.

"The critical point of contact between the prehospital and hospital phases of emergency care is the ER nurse. To her fall the vital functions of triage and history-taking. It is she who usually makes the decisions regarding urgency of the patient's condition and his priority in relation to patients already in the ER.

"In the ER, one of the procedures that is universally accepted is the removal of all clothing from a patient before examining him. The importance of this is obvious; many physicians even refuse to see the patient, except in urgent circumstances, until the patient has been completely undressed. Sometimes, however, slavish adherence to blanket orders and standard routine can get you—or rather, I should say, the patient—into trouble.

"Take a patient who has fallen and injured his head. He'll usually be brought in with his head and neck carefully immobilized. Yet, unless there is an obvious neck injury or strong suspicion of it, he'll be put through all kinds of gyrations and gymnastics to get a fancy sweater, or even a T-shirt, off over the head. And just as commonly such a patient is sent to the x-ray department for a skull series where again the head and neck are manipulated. Though trauma specialists and radiologists warn against such movements until injuries to the cervical spine are ruled out radiographically, this is standard procedure in most hospitals. I guess old habits die hard.

"THE PHYSICIAN who mans the emergency department has also come up quite a bit. Where once the ED was staffed by has-beens or moonlighters, today it is manned increasingly by physicians who are there because of interest and preference. While only a small proportion of what ED physicians treat is really urgent, it is reassuring to know that if the need arises there's a better chance than ever that a first-rate physician will be there to meet that need.

"As the importance and numbers of emergency physicians have grown, a movement has developed to make 'emergency medicine' a board-certified specialty. I must admit that I view this movement with mixed feelings. While I do favor and am working for upgrading of the quality and availability of emergency medical services, I fear that the existence of a specialist in 'emergency medicine' may discourage other physicians—the vast majority—from trying to acquire or maintain knowledge and skills in emergency care and discourage them from even attempting to stabilize patients who suddenly get very sick or are badly hurt. It seems to me that *any* physician should know how to provide basic and definitive life support in cardiac, respiratory, and traumatic emergencies. At a time when minutes count, no physician or patient should have to look for a boarded specialist. For the sake of the patient whose chips are down, 'emergency medicine' should be a specialty of *every* physician.

"Medicine has come under increasing fire in recent years. Soaring prices, consumer movements, the malpractice-insurance crisis have all worked to tarnish the physician's image. But what really seems to underlie the criticism is the feeling that the physician doesn't care about the patient, that his main concerns lie elsewhere. I can think of no better way for the physician to convey his genuine concern for the wellbeing of the people he serves than through his support and leadership of movements to improve emergency medical services in his own community—from prehospital care through definitive treatment in the right hospital by the right people.

"GOOD LAB AND X-RAY BACKUP are, of course, a must. But equally essential is good backup by medical and surgical specialists. Why win a battle out on the street or in the ED only to lose the war when the patient is ready to go upstairs? Categorization of hospitals according to their emergency service capabilities will save lives and reduce complications and disability. Categorization efforts deserve and need your support.

"Doctors have long supported the training of lay people in basic life support procedures such as CPR, but they do not always support the suggestion that every physician get such training himself. What greater moral and professional embarrassment for a doctor than to have someone collapse

EMERGENCY MEDICINE



Irving J. Cohen, Editor,
Emergency Medicine Magazine

in his presence, and then stand helpless as the victim turns blue while waiting for the ambulance to arrive.

"A few years ago, the American College of Physicians called for a 'massive education program to teach the general public how to resuscitate victims of coronary heart disease.' In its resolution, the College called upon every hospital to supply experts to teach CPR to the Boy Scouts, life guards, and police and fire personnel, and urged that CPR classes be set up in high schools. The College did not, however, call for a program to make sure every doctor could administer CPR. Shouldn't every physician know at least as much about CPR as a Boy Scout does?

"A growing number of hospitals across the country require physicians to be certified in CPR as a prerequisite for privileges. Many physicians oppose this movement for various reasons. I am hard put to understand why doctors would refuse to learn any life-saving skill, but in medicine's own interest, opposition to such efforts is unwise.

"Physicians have traditionally been at the forefront of any movement to improve medical care in the community. In the case of emergency medical services, however, the way has been blazed largely by fire departments, ambulance services, hospitals, and government agencies. Physicians have, of course, been involved, but involvement is not leadership.

"THE NOTION that physicians are the health leaders of the community is no longer being taken very seriously by the public oor even by physicians themselves in many places. Possibly because of the pressures imposed by practice or paperwork or whatever, most physicians restrict their activities to what they can do during regularly scheduled, albeit long, office hours. Perhaps in reaction to this more businesslike relationship the public no longer regards the physician as confidant or even friend.

"Perhaps we can't get back to the old one-to-one personal relationship of a more leisurely time, but doctors can show in other ways that despite all the pressures pounding them they still care about their patients, especially when they're hurt or very sick; that they want to do more, not less; that even if they can't always be there themselves, they'll see to it that someone qualified will be there when the need is greatest.

"Emergency care, as I said at the outset, must be a team effort, and the physician should take his rightful place as captain." ■

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Anusol-HC® Cream: Rx only. Each gram contains: Hydrocortisone Acetate 5.0 mg; Bismuth Subgallate 22.5 mg; Bismuth Resorcin Compound 17.5 mg; Benzyl Benzoate 12.5 mg; Peruvian Balsam 17.5 mg; Zinc Oxide 110.0 mg. Also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil and glyceryl monostearate. Non-staining.

Anusol-HC® Suppositories: Rx only. Each contains: Hydrocortisone Acetate 10.0 mg; Bismuth Subgallate 2.25%; Bismuth Resorcin Compound 1.75%; Benzyl Benzoate 1.2%; Peruvian Balsam 1.8%; Zinc Oxide 11.0%. Also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland, hydrogenated oil-cocoa butter base.

CAUTION: Federal law prohibits dispensing Anusol-HC® Cream and Anusol-HC® Suppositories without prescription.

for the maintenance and protection phase

Anusol Suppositories and Ointment: Except for hydrocortisone acetate, these forms contain the same percentages of active ingredients as listed above.

Contraindications: History of sensitivity to any component. Topical corticosteroids should not be employed in tuberculous, fungal and most viral lesions of skin (including herpes, vaccinia and varicella).

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy they should not be used unnecessarily on extended areas, in large amounts or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. When there is bacterial skin infection, topical corticosteroids should be used only with appropriate concomitant anti-microbial therapy. Prolonged or excessive use of corticosteroids might produce systemic effects.

Dosage and Administration: Anusol-HC Cream: *Adults*—Remove tube cap and attach the plastic applicator. After gentle bathing and drying of the area, apply to the exterior surface and gently rub in. For internal use, insert the applicator by applying gentle, continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories or Ointment.

Anusol-HC Suppositories: One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Anusol Suppositories: One in the morning, one at bedtime; and one immediately following each evacuation.

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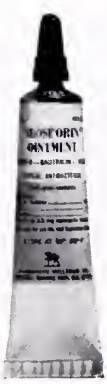
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INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



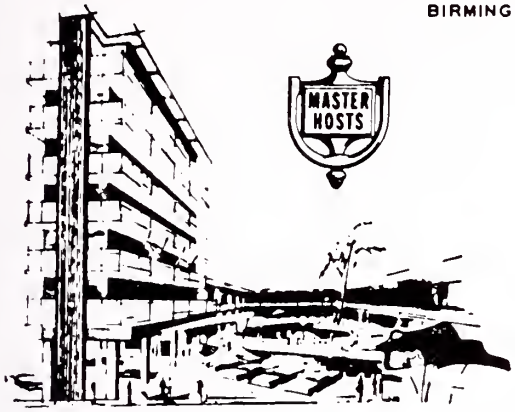
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Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

P·M·A
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D. C. 20005

DEAN'S REPORT:

Anticipating The Future— The Difficult Process Of Change



By WILLIAM R. WILLARD, M.D., Dean, College of Community Health Sciences, University of Alabama

DR. LESTER EVANS, who formerly was Medical Director of the Commonwealth Fund, often stated that the role of a university was to anticipate the future. Through its educational programs, it should prepare students to meet that future.

The established medical education program at Birmingham; the new ones developing at Mobile, Huntsville and Tuscaloosa; and the new family practice programs being created through the Statewide Family Practice Network Program were created not only to meet the pressing needs of the present, but, hopefully, to prepare graduates for the future.

But what is the future? What scientific and technological changes will occur in medicine? How will the practice of medicine be modified to accommodate scientific and technological advances, to respond to new social and environmental pressures, to meet the expectations and needs of the public and to insure the continuing competency of physicians and allied health workers throughout their professional careers? How will medical and health care be paid for in the future, and how will this affect medical practice?

NO ONE'S crystal ball is perfect, but some things seem apparent as one reviews changes during the last 25 years and some of the current issues that face the profession. However, some reasonable forecasts can be made.

1) Scientific research will continue and important new knowledge and technology will be developed that will find application in medical practice. This will result in the continuing need for well-trained specialists and subspecialists and an augmented need for continuing education of physicians and allied health practitioners.

2) The issue of availability of and accessibility to medical and health care of good quality currently is one of the most critical issues facing the medical profession and the public. This relates directly to the problem of achieving an appropriate balance between primary care physicians (family practitioners, internists and pediatricians) and other specialists and in achieving an appropriate geographic distribution of physicians.

The increase in primary care residencies and the decentralization of medical and health science education to the major campuses of the state appears to be one logical approach to the problem of achieving balance among the specialties of medicine and a better geographic distribution.

THE REGIONALIZATION of medical care with tertiary care centers in Birmingham and Mobile, where the most knowledge and sophisticated medical technology is available, clearly is an important necessity for the state. The development of regional centers where secondary and selected tertiary care services can be provided, such as Tuscaloosa, Huntsville, Montgomery and some of the larger cities in Alabama is also essential. These now exist, but in most of the localities there are deficiencies in certain needed resources of manpower, facilities and organization necessary for such secondary centers to be of maximum value.

Finally, the small towns, say those which have populations of 4 or 5,000 and up, should be populated by small groups of family physicians augmented with a few selected specialists. These would provide primary care for a majority of the population and some secondary care appropriate to the skills and resources which are or will become available in these communities. In addition, these groups need to assume responsibility for the smaller communities in their regions which can never expect to attract a physician in residence. They would do this by means of establishing primary care centers, using appropriately allied health workers, especially nurse practitioners under constant supervision and backup by the nearby group.

This regional network of tertiary, secondary and primary care centers needs to be tied together with linkages that make every physician feel that he belongs to and is an essential part of the network system. To achieve this, several techniques are available, such as the assignment of residents and students for selected periods of training, visits by faculty from the larger centers to the smaller groups for consultations and supervision of residents and students, the provision of referral and consultation resources and extensive programs of continuing education.

A PATTERN of development somewhat like that outlined appears essential to insure the ready availability and accessibility to health and medical care that the people of this state demand and expect and will also serve to help insure the continuing education and competency of all physicians participating, thus helping to guarantee the quality of medical care.

3) It seems apparent that medical and health care will be paid for sooner or later by some type of universal health insurance. There are many unanswered questions about this, such as how it is to be organized and administered and by whom, the scope of services to be offered and the costs, but, in some fashion, this health insurance will come (it is already well advanced in some respects), and it will affect in various ways, not all of them now clear, the nature of medical practice in the future and the costs of medical care.

How is a modern medical education program to respond to these projections, especially the new clinical campuses like Tuscaloosa and Huntsville that do not pretend to be full-fledged medical schools? How will these new programs affect physicians in practice today?

CONTINUED ON PAGE 49

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Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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The Difficult Process Of Change CONTINUED FROM PAGE 46

It is obvious that these programs must provide a good scientific education that will enable its graduates to practice good medicine and to benefit from continuing education. There is some debate and honest difference of opinion as to whether the clinical campus can give an adequate scientific education in the clinical fields to undergraduate medical students without an environment which has a depth of subspecialty resources and research.

OBVIOUSLY specialists and subspecialists are needed for teaching at these new clinical campuses, and some research activities will be beneficial, but the evidence is growing, in my opinion and that of many others, that good clinical instruction can be given at sites that are off campus from a medical school. This does require a modest nucleus of full-time faculty and often some supplementation in the subspecialties from physicians in the community.

Hopefully, this can be developed primarily in the private practice sector with these specialists and subspecialists participating on a part-time or volunteer basis in the educational program. However, the whole constellation that exists in a major medical school center does not appear essential for the clinical training of many students who wish to enter community practice. However, the off-campus centers must help develop the resources of their communities to become strong regional medical centers, primarily at the secondary care level for effective teaching and service.

Obviously the educational institutions must help to encourage their graduates to form small groups with appropriate ancillary help to settle in communities of need. The educational institutions must develop primary care centers as models for demonstration, teaching and research purposes, and as local groups of physicians become available to persuade them to assume the responsibility for these centers. In short, the educational institutions should be the catalyst to develop the regional network described. In so doing, they can foster the private practice of medicine.

PHYSICIANS IN HOSPITALS and communities engaging for the first time in serious medical education programs face the prospect of many changes. The programs introduce new personalities and faculty, new approaches and ideas, and a number of students and residents. All of these can be and sometimes are upsetting to local practitioners. Although many welcome these changes and see the programs as important for improving their medical practices and are stimulated by students and residents, others find them burdensome and see their accustomed and comfortable way of life somewhat disturbed. Sometimes they see the new faculty, the outreach program and other efforts to develop models of care, not as needed services to underserved areas and teaching resources, but rather as subsidized economic competition. Possibly there is some competition, but usually it is much more imaginary than real. Some fear control of their practices and hospitals by the educational institutions, although this is neither the intent nor the reality.

Nevertheless, the new programs result in changes in response to public needs and pressures, and it is difficult for many of us to accommodate comfortably to rapid change. This fact carries the seed of potential town and gown conflicts. Hopefully, both academicians and practitioners can look at the rapidly changing scene objectively and respect the concerns of others. Hopefully, they can work together for the common purpose of improving health and medical care for the people of Alabama through the educational process because this is, or at least should be, the common bond which ties the practitioners and the academicians. ■

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NHI Chances Dim For 1976

The mood in Washington over NHI remains cool. Most legislators believe that some form of national plan protecting people against catastrophic medical expenses would have a better chance of passage in Congress than a comprehensive health insurance program.

Sen. Bill Brock (R.-Tenn.), a member of the Senate Finance Committee, reports that the odds are against passage of *any* kind of health cost protection this year.

"Comprehensive health insurance has become the leper of the 94th Congress," Brock says.

"Between inflation, rising taxes, and a massive Federal deficit, there is just too much diverse opinion on the Hill to expect comprehensive insurance this Congress." he stated.

Emphasis has shifted, Brock said, to catastrophic insurance for three reasons: the serious shape of the budget, the complexity of the health care system; and because President Ford suggested the approach in the State of the Union message.

"But too many people are afraid of catastrophic as past and so-called comprehensive never will be. So the outlook for catastrophic isn't much brighter." ■

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ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival.
An insignificant amount of mebendazole is absorbed from the gastrointestinal tract. Most of this is excreted in the urine within three days either as metabolites or unchanged drug

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections.
Efficacy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Trichuris	Ascaris	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	—	(90-100%)
egg reduction				
mean	93%	99 7%	99 9%	—
(range)	(70-99%)	(99 5-100%)	—	—

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY*: VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.
PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults.
For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.
For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days.
If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

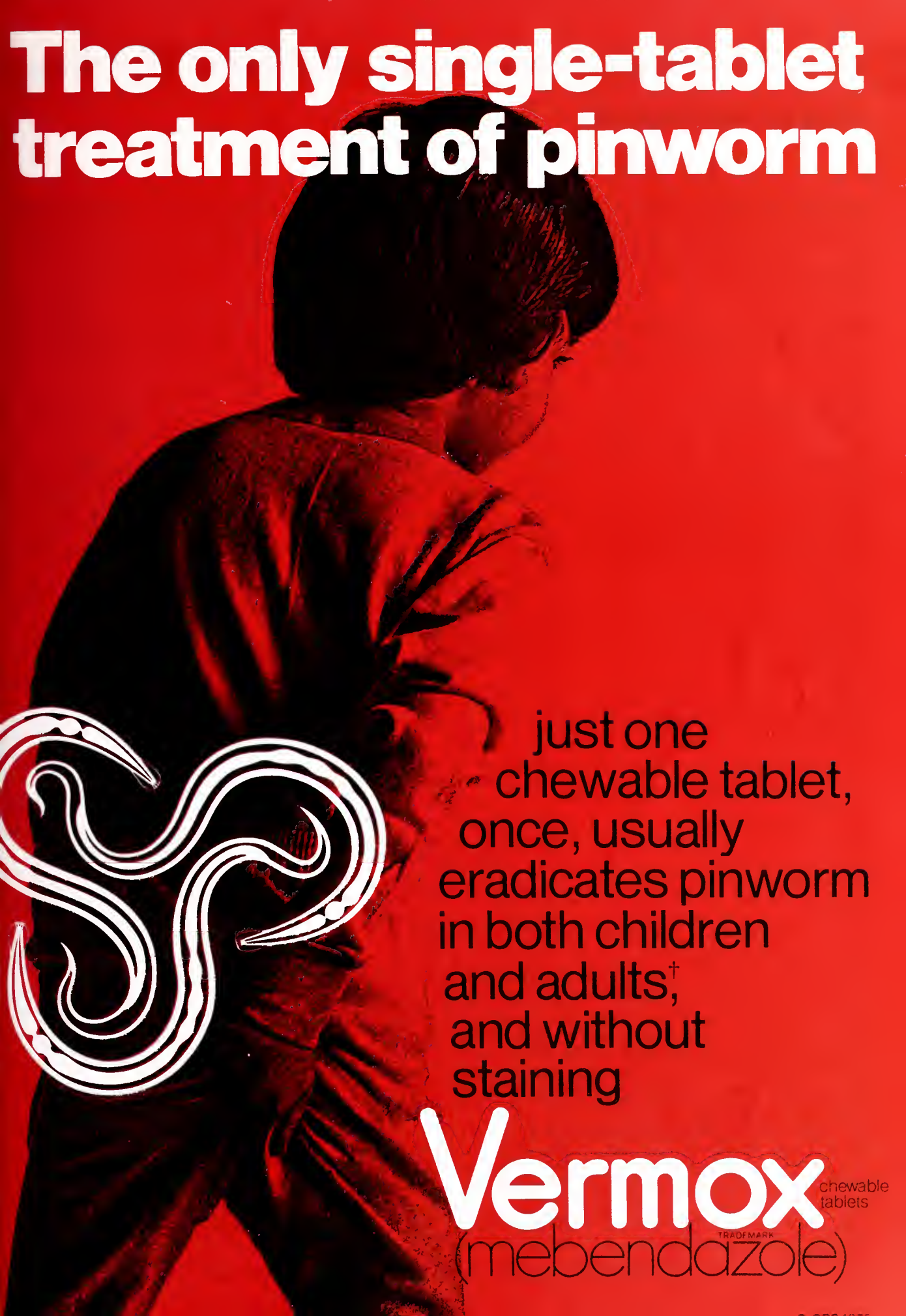
HOW SUPPLIED VERMOX is available as tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium, and co-developed by Ortho Pharmaceutical Corporation.

† Because Vermox has not been extensively studied in children under 2 years of age, the relative benefit/risk should be considered before treating these children. Vermox is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug

OJ 288-5R

Ortho Pharmaceutical Corporation
Raritan, New Jersey 08869

The only single-tablet treatment of pinworm



just one chewable tablet, once, usually eradicates pinworm in both children and adults†, and without staining

Vermox chewable tablets
TRADEMARK
(mebendazole)

Roster supplement

new members

CALHOUN COUNTY
UPHOLD, John David, b 48, mc Baylor 73, recip. Texas 75, 320 East Rustic Rd., Santa Monica Canyon, California 90402.
COFFEE COUNTY
PETTYJOHN, Frank Schmermund, b 34, mc Hahnemann 63, recip. NBME 64, 14 Diamon Circle, Ft. Rucker 36360. I.
JEFFERSON COUNTY
ANDREOLI, Thomas E., b 35, mc Georgetown 60, recip. N.C. 65, UAB Station, Birmingham 35294. Nephrology.
BENNETT, David Louis, b 44, mc Queensland 68, Lim. Lic. 74, 1717 11th Ave., South, Birmingham 35205.
BERGER, Thomas Jay, b 45, mc Tufts 71, recip. NBME 72, UAB Station, Birmingham, 35294. S.
DE SOTO, Teresa Garcia, b 31, mc Uruguay 58, Lim. Lic. 72, 619 South 19th Street, Birmingham 35233. D.
GILLILAND, Martha Jordan, b 17, mc Louisville 41, sb 42, 1717 11th Ave., South, Birmingham 35205. Ob-Gyn.
MONHEIT, Gary David, b 4, mc Colorado 70, recip. NBME 71, UAB Station, Birmingham, 35294. D.
PLOTH, David William, b 41, mc Iowa 67, recip. Iowa 68, UAB Station, Birmingham 35294. I.
RANSOM, Frederic Gordon, b 46, mc Univ. of Ala. in Birmingham 72, recip. NBME 73, 624 South 19th St., Birmingham 35233. I.
ROSTAND, Stephen George, b 39, mc Tufts 65, recip. NBME 66, 604 Zeigler Bldg., Birmingham 35294. I.
URTHALER, Ferdinand, b 38, mc Zurich 63, Lim. Lic. 76, UAB Station, Dept. of Internal Medicine, Birmingham 35294. I.
MACON COUNTY
CAPEL, Wallace, b 15, mc Howard 44, recip. La. 45, Drawer H, VA Hospital, Tuskegee 36083. GP.
PEASANT, John Marvin, b 44, mc Ala. 71, recip. NBME 72, P. O. Box 1184, Tuskegee Inst. 36088. GP.
MONTGOMERY COUNTY
BABIN, Richard Weyro, b 42, mc UCLA 69, recip. Calif. 70, 3254 Braeburn Rd., Montgomery 36111. Oph.
HERMAN, Robert Alan, b 47, mc Tufts 72, recip. NBME 73, 2942 Baldwin Brook Drive, Montgomery 36111. I.
TRIPPE, Bruce Sheldon, b 45, mc Maryland 71, recip. NBME 72, 4132 Carmichael Road, Apt. 322, Montgomery 36106. I.
MOBILE COUNTY
CAPPER, Robert Neil, b 46, mc McGill 71, recip. NBME 72, 3213 Dauphin St., Mobile 36606. D.
DEMPSEY, Peter Joseph, b 40, mc St. Louis 66, recip. Missouri 66, 2451 Fillingim St., Mobile 36617. Diagnostic Radiology.
GRAF, Curtis McVay, b 44, mc Tulane 69, recip. La. 69, 168 Louiselle St., Mobile 36607. GP.
JOHNSON, Ronald J., b 48, mc Miss. 73, recip. Miss. 73, 2451 Fillingim St., Mobile 36617. GP.
MCCULLOUGH, David Legarde, b 38, mc Bowman Gray 64, recip. N.C. 64, University of South Alabama, 2451 Fillingim St., Mobile 36617. U.
PARK, William Isaiah, III, b 43, mc Duke 68, recip. N.C. 68, 1855 Springhill Ave., Mobile 36607. Orthopedic Surgery.
RICH, Gary Martin, b 42, mc Ohio State 68, recip. Ohio 68, 1555 Springhill Ave., Mobile 36604. GP.
ROBINSON, Arvin Edward, b 39, mc Va. 64, recip. NBME 65, 2451 Fillingim St., Mobile 36617. Diagnostic Radiology.
STRING, Samuel Timothy, b 39, mc Pa. 66, recip. NBME 67, 2451 Fillingim St., Mobile 36617.
SUBER, Barry Duval, b 46, mc Miss. 71, recip. Miss. 71, 2451 Fillingim St., Mobile 36617. GP.
TUSCALOOSA COUNTY
BOWICK, Louis Albert, b 33, mc Ga. 63, recip. . Ga. 63, Box Y, University of Alabama, University 35486. Pd.
HILL, William Anderson, Jr., b 44, mc Ala. 69, recip. NBME 70, 400 C 10th Street, East, Tuscaloosa 35401. GP.
McCUE, Patrick, b 25, mc Ala. 53, sb 54, 282 Woodland Forest, Tuscaloosa, 35401.
PHELPS, Ronald Charles, b 42, mc Oregon 68, recip. NBME 69, 427 University Blvd., East, Tuscaloosa 35401. R.
PURDEY, Edward John Russell, b 21, mc Albany 52, recip. NBME 53, Student Health Center, University of Ala., University 35486.
ROSEMORE, Andrew Stuart, b 46, mc Kirksville 71, recip. Mich 72, 1515 University Blvd., Tuscaloosa 35401. Osteo.
STEINER, William Edward, b 14, mc Ill. 38, recip. Ill. 39, 18 Beacon Point, Rt. 2, Northport 35476. GP.
VILANOVA, Juan Rodriguez, b 42, mc Facultad de Medicina de la Universidad de Madrid 65, recip. Ga. 73, Druid City Hospital, Tuscaloosa 35401. Path.
WALKER COUNTY
MALI, Daryoush Jamshed, b 37, mc Freiburg 67, recip. Fla. 75, 1105 7th Ave., North, Jasper 35501. Pd.

transferred

MONTGOMERY COUNTY
PAYNE, John H., III, 2119 East South Blvd., Montgomery 36111. From Jefferson County Medical Society.
TALLADEGA COUNTY
HALL, Dennis E., 204 Medical Office Park, Talladega 35160. From Elmore County Medical Society.
TUSCALOOSA COUNTY
McLEOD, John C., 7M Northwood Lake, Northpont 35476. From Baldwin County Medical Society.

reinstated

MOBILE COUNTY
KIMBROUGH, James Edward, b 21, mc Ala. 52, sb 53, Searcy Hospital, Mt. Vernon, 36560.

deceased

JEFFERSON COUNTY
MILLER, John M., III, Birmingham, 2/29/76.
MADISON COUNTY
MIZE, Edward G., Huntsville, 2/5/76

MOBILE COUNTY
HENDERSON, Andrew D., Mobile, 11/30/76
LAUTER, Monte A., Mobile, 2/13/76

removed

COLBERT COUNTY
BISHOP, Richard P., Cherokee; and BOWEN, Robert K., Jr., Sheffield, Removed.
FRANKLIN COUNTY
MACQUIGG, David E., Lexington, Removed.
JEFFERSON COUNTY
CHATTERJEE, Chitta R., Birmingham; CUBAS, Ignacio J., Birmingham; DETKO, George J., Jr., Vero Beach, Fla.; FREEMAN, William J., Florence; GRATE, Myrle R., Jr., Hampton, Va.; GUTIERREZ-MAZORRA, Juan F., Morgantown, WV.; HALLENBECK, George A., Birmingham; INGRAM, Robert F., Birmingham; KIM, Sin, Birmingham; LYTLE, Richard A., Huntington Beach, Calif.; PALACIOS, Esteeban J., Opelika; RAMEY, Charles W., McCalla; RAND, John Hembree, Birmingham; STERLING, William Arnold, Jr., Birmingham, and SWEATMAN, Carl A., Jr., Birmingham, Removed.
JEFFERSON COUNTY
TUCKER, Frank Charles, Jr., Birmingham; and WATANABE, Haruki, Birmingham, Removed.
LEE COUNTY
LITTLE, Lucretia A., Opelika and LITTLE, Rufus L., Jr., Opelika, Removed.
MARENGO COUNTY
LUCAS, John A., III, Demopolis, Removed.
MARSHALL COUNTY
LAWLESS, Frederick W., Crossville, Removed.
MOBILE COUNTY
COWDEN, Robert W., Mobile; KING, Robert B., Mobile; and WILEY, Homer P., Mobile, Removed.
MONTGOMERY COUNTY
BOGRAD, Nathan, Montgomery, Removed.
RUSSELL COUNTY
GARNETT, Robert Louis, Phenix City; and STRICKLAND, Worthy E., Perry, Ga., Removed.
WALKER COUNTY
NOGUERA, John F., Quinton, Removed. ■

Federal tax dates for May

1. Employee status determination date for withholding exemption certificate (IRS Form W-4, Revised).
9. Semi-monthly excise taxes deposit due (IRS Form 504).
10. Quarterly return (IRS Form 941) due on Withheld Income and Social Security Taxes. (Return is due on this day if employer elected to deposit taxes for last month in quarter). (See April 10).
10. Quarterly Excise Tax return due (IRS Form 720). (Return is due on this day if taxpayer elected to deposit taxes for last month in quarter).
15. Quarterly return of Gift Tax and payment of tax due. (IRS Form 709).
15. Annual information return (IRS Form 990 or 990-A) due from certain tax-exempt organizations on a calendar year basis. (Organizations on fiscal year basis have until the 15th day of fifth month following close of fiscal year).
24. Semi-monthly excise taxes deposit due (IRS Form 504).
31. Monthly Excise Taxes deposit due (IRS Form 504). ■

Necrology

Jean M. Morgan, M.D.
1926-1976

Jean M. Morgan, M.D., professor of medicine and surgery, UAB School of Medicine and former chief of staff at the Birmingham Veterans Administration Hospital, passed away Thursday, March 25.

Dr. Morgan, the former Jean Hall McNeil, was born in Dover, Del. She earned her MD degree at the Women's Medical College of Pennsylvania.

She came to Birmingham as a resident at the UAB Medical Center. During the late 1950's, she held National Institutes of Health traineeships and fellowships in metabolism and renal medicine.

She was appointed assistant professor of medicine in 1964 and later director of the VA Hospital's Renal Research Laboratory and chief of renal services. ■

New physicians licensed to practice in Alabama



Owen, Robert Louis, M.D., Tufts University School of Medicine, 1948. Reciprocity with National Board of Medical Examiners. Specialty: Anesthesiology. Location: Dothan.



Barnes, Linda Cauthen, M.D., University of Miami School of Medicine, 1965. Reciprocity with Florida. Specialty: Plastic Surgery.



Howell, Mildred Marie Ennis, M.D., University of Alabama School of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



Peters, Dennis Howard, M.D., University of Tennessee College of Medicine, 1970. Reciprocity with Rennessee. Location: Mobile.



Carlisle, Willard Roger, M.D., Baylor College of Medicine, 1971. Reciprocity with Texas. Specialty: Internal Medicine.



Johnston, William Joseph, Jr., M.D., LSU School of Medicine, 1973. Reciprocity with Louisiana (FLEX). Specialty: General Surgery. Location: Birmingham.



Reed, Robert Leslie, M.D., Temple University Medical School, 1963. Reciprocity with National Board of Medical Examiners. Specialty: Anesthesiology. Location: Huntsville.



deShazo, Richard Denson, M.D., University of Alabama College of Medicine, 1971. Reciprocity with National Board of Medical Examiners. Specialty: Internal Medicine.



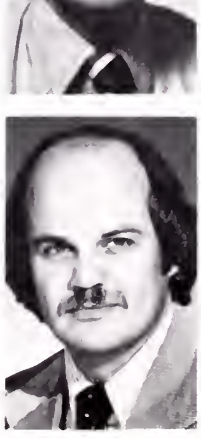
Lilly, Charles John, Jr., M.D., Tulane Medical School, 1971. Reciprocity with Louisiana (FLEX). Specialty: Diagnostic Radiology. Location: Mobile.



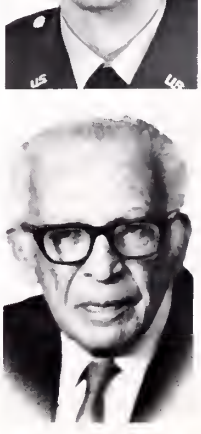
Rossing, Ronald Mark, M.D., Northwestern University Medical School, 1972. Reciprocity with South Dakota. Location: Ft. Rucker.



Geary, Walter Thomas, Jr., M.D., LSU School of Medicine, 1974. Reciprocity with Louisiana (FLEX). Location: Birmingham.



McKenzie, Thomas Aaron, III, M.D., Vanderbilt Medical School, 1970. Reciprocity with National Board of Medical Examiners. Location: Huntsville.



Rubin, Jacob S., M.D., McGill University Faculty of Medicine, 1930. Reciprocity with New York.



Physicians' placement service in Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

General Practice-Radiology, Diagnostic: Age 30; Osmania University 1968; American Board eligible-radiology; seeking multi-specialty group, single specialty group, partnership, institutional, emergency room, solo, or other. Available July 1976. LW - 02611

Family Practice: Age 31; Howard University 1973; American Board eligible; seeking partnership, multi-specialty group, solo, single specialty group, or other. Available July 1976. LW-03522.

Pediatrics-Family Practice: AGe 32; Osmania University 1966; American Board certified; seeking multi-specialty group, institutional, or single specialty group. Available July 1976. LW-00635.

Orthopedic Surgery: Age 42; University of Washington 1962; American Board certified; seeking solo or limited partnership, preferably near Gulf Coast, 100,000 plus population. Available December 1976. LW-1.

Orthopedic Surgery: Age 36; University of Maryland 1966; National Board; American Board certified; seeking single specialty group, partnership, multi-specialty group or solo. Available August 1976. LW-03545.

Internal Medicine-Emergency Medicine: Age 29, Medical College of Alabama 1972; National Board certified; American Board eligible; seeking emergency room, industrial, or multi-specialty group. LW - 03382

Internal Medicine: Age 27; University of Miami 1973; National Board certified; American Board eligible; seeking single specialty group, partnership, multi-specialty group, or solo. Available July 1976. LW - 02551

Internal Medicine-Gastroenterology: Age 33; Medical College of Virginia 1969; National Board certified; American Board eligible; seeking multi-specialty group, institutional, single specialty group, or partnership. Available August 1976. LW - 02599

Internal Medicine-Gastroenterology: Age 33; University of Iowa 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership. Available July 1976. LW - 01817

Internal Medicine: Age 32; University of Kentucky 1970; National Board certified; American Board eligible; seeking solo, partnership or research. Available July 1976. LW - 03320

Pediatrics: Age 30; SUNY Upstate New York 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership, solo, or other. Available July 1976. LW - 02336

Surgery: Age 38; Jefferson Medical College 1966; National Board certified; American Board certified; seeking single specialty group, partnership, multi-specialty group. Available August 1976. LW - 02968

Surgery: Age 34; Loyola University Stritch 1968; National Board certified; American Board eligible; seeking partnership, single specialty group, multi-specialty group, solo, or institutional. Available August 1976. LW - 02954

PHYSICIANS WANTED

(Opportunities For Practice)

GENERAL SURGEON needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36 bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-14

Physicians wanted **(General Internal Medicine, Gastroenterologist, Dermatologist)** Trade area, 400,000 population. Population of town: 45,000, located in Northeast Alabama. Small town advantages with big city conveniences within hour's drive. Ground floor professional opportunity to join a group of internists in the development of programs in General Internal Medicine, medical specialties, and other disciplines appropriate for the establishment of a regional multispecialty health clinic. Financial arrangements negotiable. No investment necessary. Opportunity for partnership in two years. PW-8

A community with combined population of 10,000 located near Mobile, Alabama is seeking a **general practitioner.** Office space available with living quarters. Several churches and schools. PW-9

General Practitioner's 2 family physicians wanted for general practice in a 64-bed hospital, located between 2 North Alabama towns (in the heart of the Tennessee Valley) with a trade population of 18,000. Office space available. Within 35 miles of large city. Large amount of industrial work in our area. PW-7

WANTED—**General Internist** or Subspecialist with interest in general medicine. University town, population approximately 60,000, to join 4 other internists in a multi-specialty clinic setting; 250-bed expanding general hospital; all-specialty coverage, office expansion in progress; attractive living area. PW-11

Tri-community area of approximately 20,000 population located in a tri-city area of approximately 200,000 population in south central Alabama is seeking a **General Practitioner.** Existing building available for renovating. Churches, schools, recreational facilities; also military privileges and services available in the area. PW-1.

CONTINUED ON PAGE 57

The Medical Association of the State of Alabama

19 South Jackson Street – Montgomery, Alabama 36104

The Board of Censors

William T. Wright, M.D.
President
266 So. McGregor Ave.
Mobile, Alabama 36608

Dear Colleague:

As you probably know, the Medical Association of the State of Alabama sponsors the "Physician for the Day" program to provide first aid service for legislators in session.

This program has been greatly appreciated by the legislators and in turn, those doctors who have served have learned how the legislative process works, how to appreciate the time the legislators spend at the Capitol, and the importance of providing accurate information on health matters to the lawmakers. Resolutions passed and letters received from legislators indicate that the program has generated considerable goodwill on Capitol Hill.

The 1976 session of the legislature starts May 4, 1976. In order to set up a schedule for the "Physician for the Day", I would appreciate your volunteering to serve one day in the legislature. The legislature is usually in session on Tuesdays and Thursdays, May through August. You would be on duty at the Capitol from 10:00 AM to about 5:00 PM.

We will appreciate your cooperation in participating in this program this year, and I believe that we can gain a great deal from it. Please call the MASA Legislative Department toll free at 1-800-392-5668 to reserve a day.

Sincerely,

Bill

W. T. Wright, M.D.
President

Digest of actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the April 3 meeting of the State Board of Censors:

- Approved Financial Statement for period ending March 31, 1976, showing receipts of $174,302.96 and disbursements of $47,848.52.
- Received as information Supplemental Report of Secretary-Treasurer, which shows 15 deaths since submission of the Annual Report of Secretary-Treasurer.
- Voted to take the following action regarding compliance with the new Pension Reform Act: (1) That the membership on MASA's Pension Committee be increased from three members to five members; (2) that all persons presently employed by MASA who would come under the new law be added to the Pension Plan; (3) that MASA's present pension plan be continued until the new law is implemented which will be effective December 31, 1976; and (4) that the EBS-1 Plan Description Form be filled out by the Central Office Staff and forwarded before the deadline date which is May 31, 1976.
- Appointed Orizaba Emfinger, M.D. to succeed himself of the Council on Animal and Environmental Health.
- Received report that 93-641, the Health Systems Agency implementation, will be delayed for at least two years due to financial problems.
- Approved second allotment of educational funds in the amount of $2,500 for ALAPAC.
- Voted to proceed with the establishment of a mutual insurance company. ■



"The chart calls for me to give you a massage, but this definitely is not the doctor's handwriting!"

CONTINUED FROM PAGE 55

PHYSICIANS' PLACEMENT SERVICE

Opportunity for **General Practitioner** in town of 3,000 population; trade area 16,000 population located in southeast Alabama, within short distance of city of 35,000 population where there are two hospitals. Located 85 miles from Gulf Coast beaches. Office space and equipment available. Last physician in town died two years ago. Industrial and farming area. Churches, schools and recreational activities. PW-2.

Opportunity for **General Practitioner** in town of 4,000 population; trade area 30,000 population located in southeast Alabama within short distance of hospitals. One g.p. and two dentists presently in the town. Agricultural and industrial area. PW-3.

General Practitioner—Opportunity in central Alabama town of 5,000 population, with a trade area of 30,000 population. Located 30 miles east of Montgomery, Alabama, and 28 miles west of Auburn University. Adjacent to Lake Martin. A new 77-bed hospital with a new Medical Arts Complex adjoining with office space available. Guaranteed income for a General Practitioner or Family Physician. PW-4.

General Surgeon needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36-bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-13/1.

Full-time Faculty Position: Board Certified **Family Physician** to teach/practice in new and growing medical school. Teach family practice residents/medical students. Competetive salary/fringe benefits. An affirmative action/equal employment opportunity employer. PW-5.

GENERAL PRACTITIONER needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36 bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-13

General Surgeon wanted. Tremendous opportunity to associate with General Surgeon in North Ala. Located in the heart of Tennessee Valley Mountain Lake Region. Small town setting, pop. 10,000. Two hospitals (300 beds), ten minutes from Decatur, pop. 45,000. Thirty minutes from Huntsville. Unlimited recreational activities; golf, tennis, sailing. Excellent school system and cultural activities. PW-12 ■

ALABAMA DEPARTMENT OF PUBLIC HEALTH:

Bureau of Preventable Diseases

FREDERICK S. WOLF, M.D., DIRECTOR

Influenza

In speaking of this symptom/complex, reference is made to a disease of viral origin rather than the disease resulting from the successful invasion of man by the bacillus, Hemophilus influenza. The causative virus consists of fragments of a nucleic acid, RNA, contained in a membrane. ; The RNA fragments are generally believed to be seven in number. In this respect, the virus of influenza differs from the single strand RNA found in most viruses. Three types of virus have been identified. Of these, Type "C" is comparatively harmless. Type "B" rarely causes more than local outbreaks. Type "A" and its variants are the causative agents in epidemic and pandemic years.

The Type "A" virus is able to produce antigen variants at a rapid rate. The mechanism of forming the antigenic variants is controversial. One explanation is the interaction of man-animal virus in a process of recombination. A second is the more usual device of random mutation. Whatever the mechanism, a "new" virus appears for which man's immune system is unprepared. For reason or reasons unknown, there is apparently a ten-year cycle yielding a variant of sufficient virulence to produce a world-wife influenza pandemic. Current information suggests the possibility of a Type "A" variant producing an influenza clinically comparable to the pandemic of 1917-1918.

The data in the State Health Department Bureau of Vital Statistics suggest 392 influenza and 3,387 pneumonia deaths in 1917. In 1918, pneumonia was recorded in 5,882 and influenza in 5,446 deaths.

Lead

Recently the National Institute for Occupational Safety and Health (NIOSH) circulated information on the dangers of the prophylactic use of EDTA and/or penicillamine to lower blood levels in individuals exposed to lead as metal or fumes. A study conducted by the Mount Sinai School of Medicine in New York City indicates that neurologic and metabolic impairment continues to occur despite lower blood levels following therapy. Both EDTA and penicillamine are neohrotoxic. The possibility that these agents may augment the nephrotoxicity of lead when they are used over a long term remains to be investigated.

Nosocomial Infection

With reference to urinary tract infection an article by Stamn, W. E., **Annals of Internal Medicine**, 82: 386-390, 1975, should be of assistance in avoiding urinary infections.

Poliomyelitis

The virus of poliomyelitis is widely distributed both as a wild form or as a product of an immunization campaign. Recently immunized children can and do expose unimmunized parents to viral infection. A complete immunization program should protect young adults as well as children against poliomyelitis.

A study report by T. J. John, et al, "Effect of Breast-Feeding on Seroconversion of Infants to Oral Polio virus Vaccination," **Pediatrics**, 57: 47-53, 1976, conclude that breast-feeding has *no inhibitory effect* on antibod response of infants beyond the newborn period to OPV.

Enterovirus Type 70

This virus is now considered the cause of Acut Haemorrhagic Conjunctivitis. Physicians meeting this highl contagious disease are urged to report the case to the Stat Epidemiologist. The telephone number is 832-3207.

Gonorrhea—February, 1976

Total Female Specimens	21,86
Positive Cultures	.97
Positive	4.4
Submitted from Private Practice	12,60
Positive Cultures	.24
Positive	2.0

Current Morbidity Statistics—1976

	Feb.	March	*E.E. March
Tuberculosis	68	55	9
Syphilis	41	44	2
Gonorrhea	1,956	2,613	87
Chancroid	0	0	
Typhoid fever	0	0	
Salmonella	23	17	1
Undulant fever	0	0	
Shigella	7	8	
Amebic dysentery	0	1	
Scarlet fever & strep. throat	685	664	55
Diphtheria	0	0	
Whooping cough	1	0	
Meningitis	33	12	
Tularemia	0	0	
Tetanus	0	0	
Poliomyelitis	0	0	
Encephalitis	8	1	
Smallpox	0	0	
Measles	0	0	1
German Measles	0	0	2
Chickenpox	35	76	10
Mumps	20	25	6
Hepatitis	29	42	3
Typhus fever	0	0	
Rocky Mt. spotted fever	0	1	
Malaria	0	0	
Rheumatic fever	2	4	1
Rheumatic heart	16	10	2
Influenza	56	617	44
Pneumonia	432	378	53
Rabies - Human cases	0	0	
Pos. animal heads	2	0	

As reported by physicians and including deaths not reported as cases. *E.E. - The estimated expectancy represents the median incidence of the past nine years. ■

Digest of actions—State Committee of Public Health

The State Committee of Public Health at its regular meeting on April 14, 1976, took the following actions:

- Received list of Alabama Coroners by address and occupation.
- Advised regarding the significance of the swine influenza virus vaccine and the importance of immunizing a significant portion of the population against this potential hazard resulting from a change in the antigenic structure of this virus.
- Approved bills for introduction into the next session of the legislature providing for the Clean Drinking Water enforcement; amendments to the Controlled Substance Act which would name the Board of Medical Examiners as the certifying board for physicians; a bill providing for coordinating the legal services of the Department; and designated Dr. C. E. Robert Parker as Administrative Assistant for Drug Control to certify controlled substance registration certificates for Alabama licensed physicians.
- Approved Computerized Axial Tomography Unit for St. Vincent's Hospital, Birmingham.
- Disapproved application for Certificate of Need from Leeds Community Hospital, Leeds, Alabama, following a hearing.
- Recommended disapproval for four skilled beds for South Haven Nursing Home, Birmingham, unless the applicant requests a delay to May 31 for clarification and notification of the application.
- Approved allocation of a $2,304,500 Hill-Burton loan to the Baptist Memorial Hospital, Gadsden.
- Approved Medicaid Plan Amendment regarding compliance with the Merit System.
- Approved modification of the implementation date of MAC-EAC regulations to be effective at the same time the Federal regulations would be implemented on August 26, 1976.
- Approved request to DHEW for assistance in cost control of abuse of Medicaid.
- Approved regulation which would activate investigation by Medicaid of patient charges per visit which exceed the mean by one standard deviation.
- Was advised that suit against HEW had been filed requesting the return of Russell County to an Alabama Health Service Area.
- Voted non-endorsement of the Nurse-Midwife Bill as proposed by the Alabama Nurses Association.
- Referred to the Council on Dental Health a request to propose stronger fluoridation legislation.
- Advised of the availability of a Gas Chromatograph breath analyzer for the Chemical Testing Intoxication Program.
- Received a summary report of the H. Influenzae Meningitis Type B vaccine trial in Madison County and noted that their goal was to prevent H. Influenzae Meningitis in infants, 15 months of age and older. Vaccine will be used no earlier than six months with a booster dose at 15 months. (Similar studies in Finland and North Carolina indicate a highly effective vaccine in children over 15 months and 18 months of age with lesser protection for younger babies.) ■



about the cover... A whole new field of medicine has sprung to life and goes by the name of emergency medicine. Emergency care has extended beyond the walls of the hospital emergency room. Emergency medical training has now engulfed citizens of communities all across this nation. This issue of the JOURNAL pays a special tribute to those individuals responsible for the successful delivery of emergency medicine today.—Graphic Design by MASA's own Michael (H. A. Milton) Payne, Photolithographer.

Radiology Courses

The Institute for Pediatric Radiology and Chas. E. Shopfner, M.D., will present a continuing education program entitled "Pediatric Orthopedic Radiology", August 28-29, 1976, at the Monteleone Hotel in New Orleans. This program is another in the "Current Status of Pediatric Radiology" series.

For additional information, please write: Ms. Wanda Patton, Exe. Sec., Institute for Pediatric Radiology, 4148 N. Cleveland Ave., Kansas City, Mo. 64117.

The Department of Radiology and the A. Webb Roberts Center for Continuing Education of The University of Texas Health Science Center are sponsoring a two and one half day course entitled Refresher Course in Gastrointestinal Radiology to be presented October 29-31, 1976 at the Fairmont Hotel in Dallas, Texas.

The course meets the criteria for 18 hours of credit in Category I for the Physician's Recognition Award of the American Medical Association.

The course subject matter will include review of all aspects of Gastrointestinal Radiology (including Ultrasound), with upgrade on latest techniques.

For further information regarding the course, please contact: Robert N. Berk, M.D., Department of Radiology, Parkland Memorial Hospital, 5201 Harry Hines Boulevard, Dallas, Texas 75235. ■

CME CALENDAR

- May 3 — Norfolk, Virginia; May 5 — Chicago, Illinois; and May 7 — San Francisco, California. Group Health Foundation "Public Law 93-641: How it will effect Health Care Delivery At The Local Level." Information contact: Mrs. Gay Ruth Horney, Conference Coordinator, Group Health Foundation, 1717 Massachusetts Avenue, N.W., Suite 701, Washington, D.C. 20036. (202-483-4012).
- May 10-13, 1976: American College of Obstetricians and Gynecologists, Annual Meeting. Dallas, Texas. Contact: ACOG, One East Wacker Street, Chicago, Illinois 60601.
- May 13-14, 1976, "Annual CV Scientific Sessions, Birmingham — Jefferson Civic Center. Sponsor: Ala. Heart Assn., P. O. Box 31085, Birmingham 35222.
- May 13-14, University of Alabama in Birmingham presents with Society for Adolescent Medicine "Immunology and Infe-tious Disease in Adolescence". Contact: Benjamin B. Wells, M.D., PH.D, Associate Dean, Director, Division of Continuing Medical Education, University of Alabama School of Medicine, 419 MT, University Station, Birmingham, Alabama 35294 (205-934-2687)
- May 14-15, 1976, Annual meeting of the Alabama Orthopaedic Society, Grand Hotel, Point Clear, Alabama.
- May 16, 1976 "Nephrology Workshop", University of Kentucky Medical Center, Lexington, Kentucky. Registration Fee: $12.00. For further information contact Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.
- May 17-18, 1976, "Care of the Infant With Respiratory Distress," University of Kentucky Medical Center, Lexington, Kentucky. Registration Fee: $35.00. For further information contact: Frank R. Lemon, M.D., Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.
- May 21-22, Internal Medicine Scientific Meeting, Grand Hotel, Point Clear, Alabama. (Alabama Regional Meeting of the American College of Physicians). Information: Thomas N. James, M.D., University of Alabama Medical Center, Birmingham, Alabama 35294. ■

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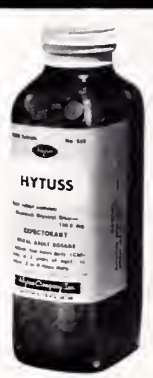
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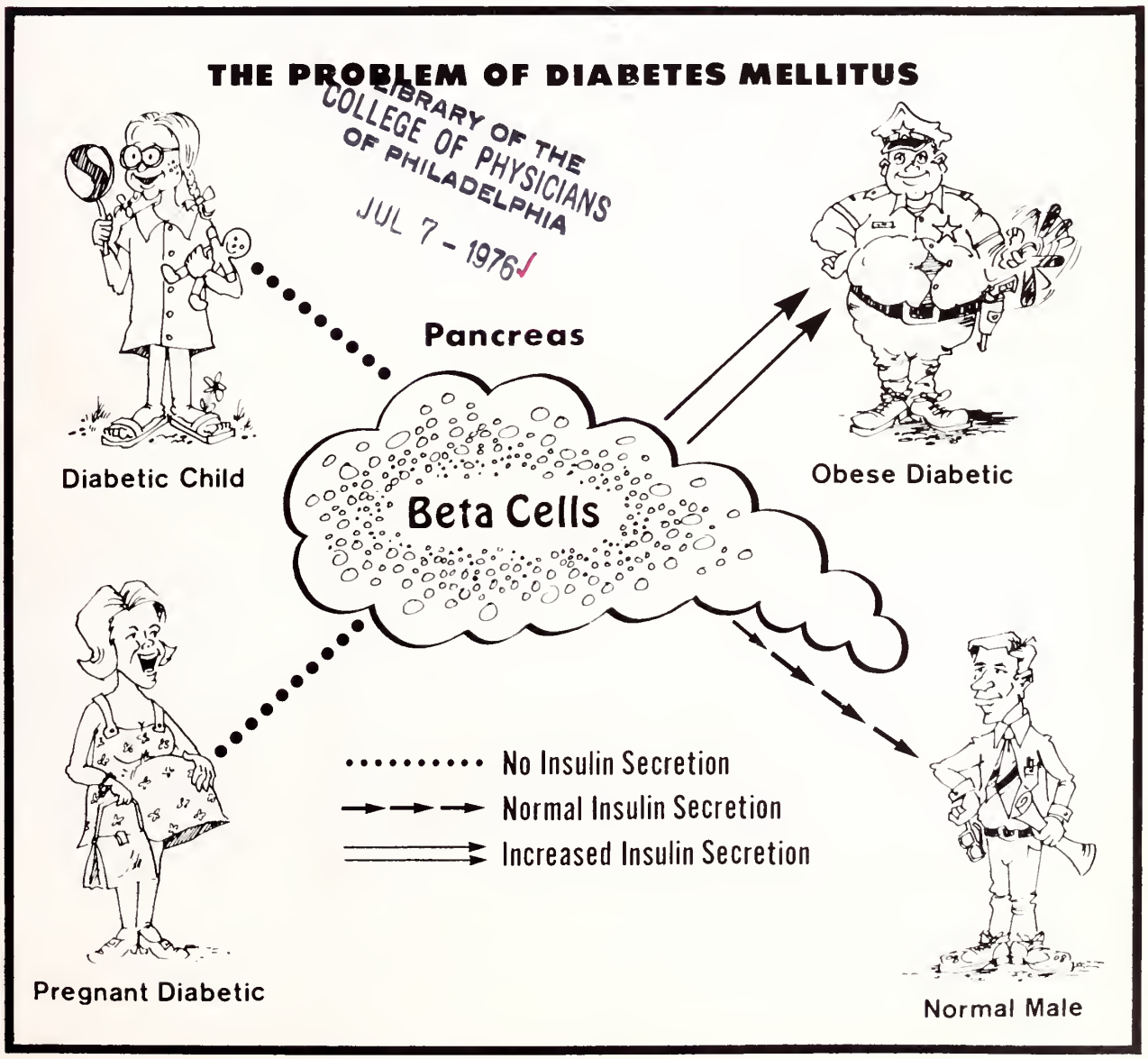
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JOURNAL of the Medical Association of the State of ALABAMA

ALABAMA PHYSICIAN

MAY 1976

#11
mf. 45
HDS



Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

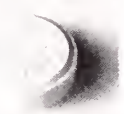
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

The JOURNAL

of the

Medical Association of the State of Alabama

VOLUME 45, NUMBER 11 MAY 1976

Office of Publication

19 So. Jackson St. Montgomery, Ala. 36104

Subscription Price $12.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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WHEN you hear the name Doctor Rush around the MASA Headquarters building, they are not alluding to the Revolutionary War patriot whose name has become so familiar in this year of America's Bicentennial observance. The name applies to the member of the Association who has suddenly run short of his printed office supplies and has taken all of the short cuts which MASA offers to its members to replenish his stock with the least possible delay. When an emergency order of this nature comes in, the Printing Department affixes a tag, "Dr. Rush", which gives it a highest priority.

An estimated 20% of the members of MASA have now discovered that they can purchase top quality printed material—stationery, envelopes, patient examination forms, billing statements, etc.—at approximately one-half the amount charged them by commercial printers.

The cost of the initial order includes composition (typesetting), layout and all of the other chores which a professional printer must perform to produce the printed product. On this first order the cost saving may not be greater than 25% or if it is a very complicated form, the initial price may be very close to the commercial price.

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THE AVERAGE physician in Alabama will spend more than $500 per year on office printing. If his average saving is only 30%, he has collected a membership dividend equal to his annual State Association dues.

Members who have some doubts as to whether the Association can produce quality printing should take a look at the Journal of the Medical Association of the State of Alabama. With the exception of the pasted-in advertising inserts which are distributed nationally, the entire *Journal* is produced and printed by the MASA staff. The experts say it compares favorably with all of the other state medical journals. ■

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

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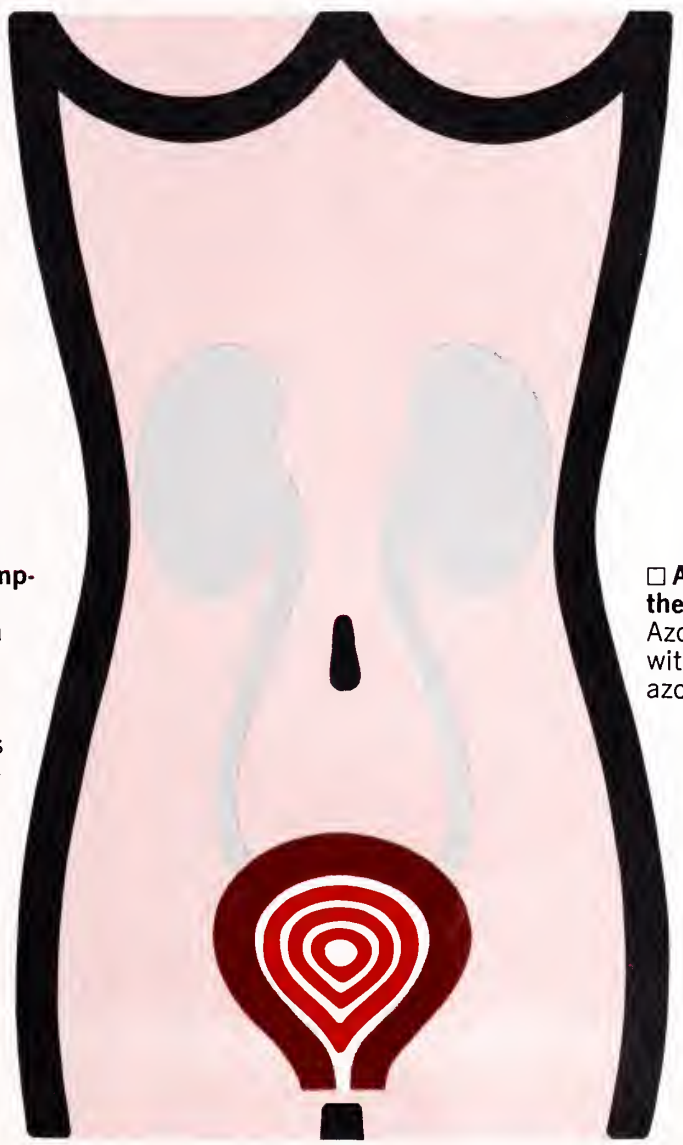
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When pain complicates acute cystitis*

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain for the pathogens



☐ **Early relief of painful symptoms** such as burning and discomfort associated with urgency and frequency.

☐ **Effective control of susceptible pathogens** such as *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris*.

☐ **Appropriate antibacterial therapy:** up to three days with Azo Gantanol, then 11 days with Gantanol® (sulfamethoxazole).

*nonobstructed; due to susceptible organisms

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TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* Warning
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

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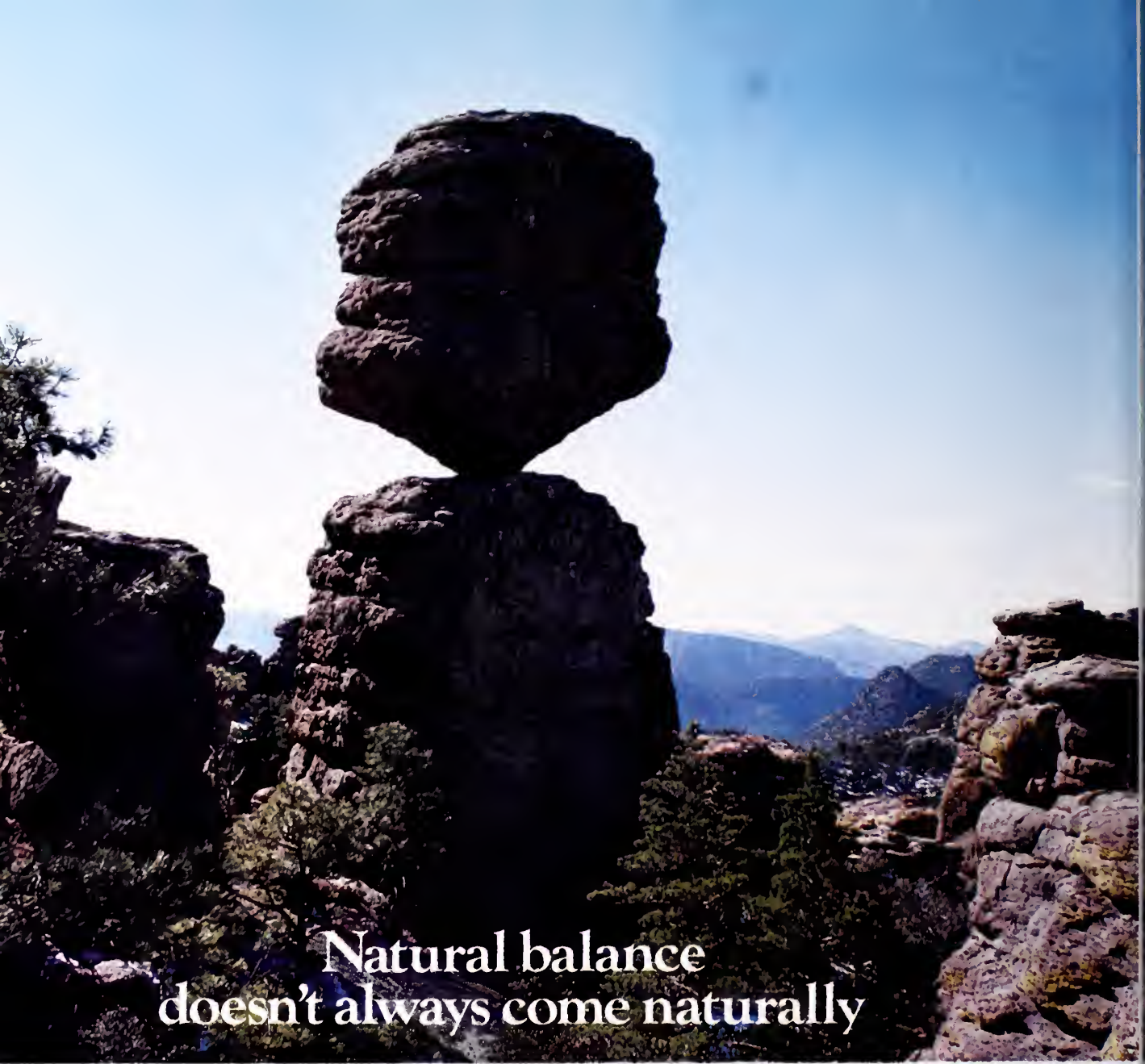
Medrol® 4 mg Dosepak*

methylprednisolone, Upjohn

The explicit printed dosage instructions that accompany each Dosepak make it easy for the patient to understand and follow the dosage regimen.



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□ Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
□ Can relieve nausea and vomiting often associated with vertigo.*
□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
□ Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
□ Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

Physicians Solving A Common Problem



WILLIAM T. WRIGHT, M.D.

As we approach this year together, there is little doubt in my mind that malpractice insurance will be one of the foremost issues facing the Medical Association of the State of Alabama. Other presidents have faced very important challenges, such as Medicare and Medicaid and various third party encroachments in private practice.

I was pleased that the College of Counsellors and the House of Delegates were united in their support of our plans to proceed with our own MASA endorsed insurance company.

When we began studying the malpractice insurance problem, 1 was one of those who asked, "Since insurance companies are getting out of the business, why should we get into it?" However, as we began looking at the alternatives, it was apparent that we were going to assume the risk one way or the other.

If we had found an insurance company, which we did not, we would be looking at a short term solution with the possibility of withdrawal at anytime. Also, all possible risk factors for lawsuits would have been figured into the premiums with healthy cushions for all those possible loss factors which might not materialize.

The second alternative would be to go uninsured. There are some who advocate this approach. This is a free country and everyone is entitled to their own opinion, but to me this would be totally unacceptable. I would not be willing to risk what I have worked hard for 22 years earning on what appeared to 12 jurors to be malpractice on my part or on the part of someone on my staff.

Some say plaintiffs attorneys would not be apt to sue if you did not have insurance, but we know some vindictive patients would be thrilled to punish the physician by taking his assets rather than the money from the insurance company.

The third alternative would be to activate the Joint Underwriting Association. In other states where this has been done, it has resulted in increased premiums and in studying the plans of other states it seems to me to be a Pandora's Box.

The fourth alternative would be to sit back and tell the Federal Government we could not solve the problem and ask for Federal intervention, which HEW does not at this time desire and neither do I. We seem now to have the cooperation of many attorneys and legislators and other groups vital to the success of our company. We must launch on a program of educating the public to the fact that there's a difference between "malpractice" and "maloccurrence."

We cannot expect to always get a good result as we have more and more life saving procedures being developed. There will be more maloccurrence. We as physicians must be plain with factors and not be quick to criticize a bad result from a fellow physician without all the facts being known.

If true malpractice does exist, then the patient's claim must be carefully reviewed and an equitable settlement given. Legislation passed last year greatly strengthens the power of the Board of Medical Examiners to police our own ranks, which we must do.

I feel fortunate to have the wisdom of our Board of Censors and Insurance Committee to help us solve this mutual problem. When we call on each of you this year for your cooperation, please be ready to help us solve this problem together.

Bill



The Month In Washington

Carter's Position on NHI—Presidential candidate Jimmy Carter has abandoned his fencestraddling position on national health insurance and announced his support for a phased-in comprehensive program that sounds much like that proposed by labor leaders and Sen. Edward Kennedy (D-Mass.).

The former Georgia Governor, who has been accused by his political enemies of failing to take clear-cut stands on controversial national issues, came out four-square for a broad NHI at the annual convention of the Student National Medical Association.

Carter said he favored universal, mandatory coverage of comprehensive benefits financed through payroll taxes and general tax revenues. He called for strict controls and said NHI should first benefit "those who need it most....with the understanding that it will be a comprehensive program at the end."

The candidate also supported the controversial legislation sponsored by Sen. Herman Talmadge (D-Ga.) to "place controls on hospital costs and physician charges under Medicare and Medicaid." He seemed to endorse as well the medical manpower provisions backed by Sen. Kennedy, declaring the "medical establishment has not responded to the shortage of primary care services and practitioners."

Carter said he supports "organized approaches to delivery of services", contending the American health care system has become "a comprehensive catastrophe."

***

Delay of MAC—The starting date of the government's Maximum Allowable Cost (MAC) drug purchase program has been delayed until August 26, a four-months postponment.

HEW officials said the delay was to permit states more time to prepare for the program. Two months ago, HEW Secretary F. David Mathews rejected a Pharmaceutical Manufacturers Association request to postpone the program.

Meanwhile, attorneys for the AMA and HEW were preparing final briefs in the AMA's lawsuit against the MAC regulations.

The AMA failed suit against HEW last summer to stop implementation of the MAC program. The AMA contends the regulations violate patients' right to seek the best medical care, and that HEW exceeded its statutory authority in issuing the regulations.

The MAC rules would require physicians to prescribe the lowest-cost generic form available of certain drugs for Medicare and Medicaid patients. ■

BRIEF SUMMARY OF
PRESCRIBING INFORMATION
ANTIMINTH ® (pyrantel pamoate)
ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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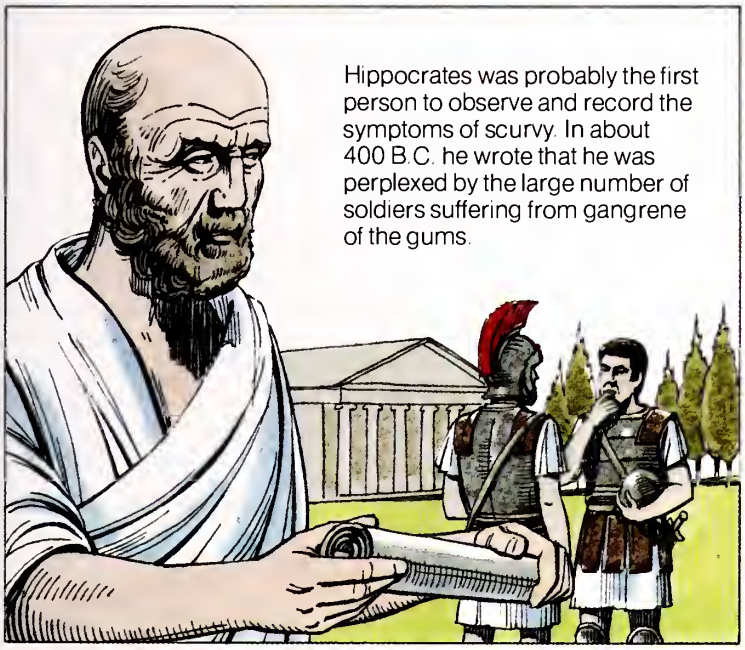
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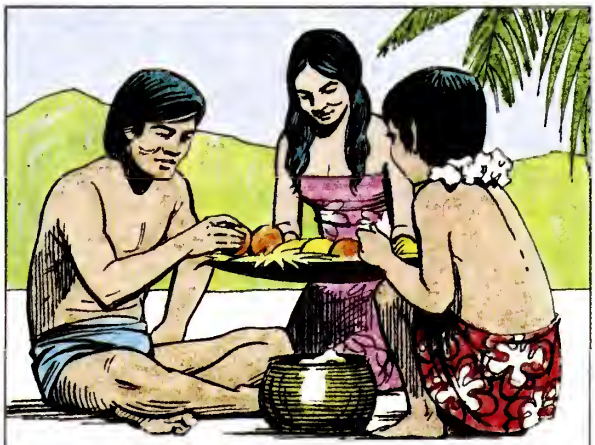
The ALLBEE® with C Scrapbook of Vitamin Facts & Fallacies

Northern and Central Europeans must obtain their vitamin C primarily from cabbage because these countries don't have a Florida or California as a source of citrus fruits. These inhabitants get about twice as much ascorbic acid when they eat their cabbage raw as when they boil it.





Hippocrates was probably the first person to observe and record the symptoms of scurvy. In about 400 B.C. he wrote that he was perplexed by the large number of soldiers suffering from gangrene of the gums.



People in more primitive, less commercialized societies often eat better balanced diets than affluent Americans. These natives instinctively choose nourishing foods because their bodies tell them what they need. The dietary habits of Americans are often influenced by television commercials that appeal to our wants instead of our needs.



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hyoscine hydrobromide	0.0065 mg.	0.0065 mg.	0.0195 mg.
phenobarbital (warning: may be habit forming)	(¼ gr.) 16.2 mg.	(½ gr.) 32.4 mg.	(¾ gr.) 48.6 mg.

Brief summary. Adverse Reactions: Blurring of vision, dry mouth, difficult urination, and flushing or dryness of the skin may occur on higher dosage levels, rarely on usual dosage. Contraindications: Glaucoma; renal or hepatic disease; obstructive uropathy (for example, bladder neck obstruction due to prostatic hypertrophy); or hypersensitivity to any of the ingredients.

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GUEST EDITORIAL:

DIABETES MELLITUS—1976

Diabetes mellitus is a common disease affecting all age groups in our population and continues to present difficult management problems for both patients and physicians. The cover of this issue of the *Journal* pictorally represents an adolescent child, a pregnant lady and an obese policeman with diabetes. It is clear, therefore, that patients with diabetes are seen by family physicians, pediatricians, obstetricians, internists and others in various medical specialties. The basic concepts of diabetic pathophysiology and an approach to management is therefore essential for any physician involved in patient care.

A deficiency and/or resistance to the diverse actions of insulin[1-2] remains the most important pathophysiologic process in the disease. As noted on the cover, young individuals usually are insulin deficient, whereas obesity is usually associated with insulin hypersecretion but its action is blunted by insulin resistance which is incompletely understood. Because the disease affects blood vessels, diabetic complications are common, often with devastating and disasterous consequences.

For example, diabetic retinopathy is now the leading cause of new blindness in patients up to age sixty[3]. In addition, toxemia of pregnancy, polyhydramnios and large babies with hyaline membrane disease are potential problems facing every physician caring for the pregnant diabetic. Diabetic patients with renal failure, hypertension, congestive heart failure and peripheral vascular disease are seen daily in physician's offices, hospital emergency rooms, clinics and wards. The economic loss secondary to this disease is enormous.

WHAT is a proper approach physicians should take in evaluating and managing patients with diabetes mellitus in 1976? As with any disease process ideal therapy should be curative. Unfortunately, pancreatic transplants have met with little success in humans[4]. Liver islet cell transplantation has been successful in inbred mice but has not yet been accomplished in humans. An artificial insulin secreting "pancreas" that is useful in diabetic populations has yet to be developed. It is clear, therefore, that although a cure is perhaps on the horizon, it is a considerable distance away.

In the meantime, however, there is still hope. Animal studies show that reduction of hyperglycemia prevents or minimizes the formation of diabetic-like lesions in nerve, kidney and eye[5]. A recent report from France[6] showed that a small group of randomized, prospectively studied diabetics had less retinopathy if their diabetes were well controlled. The evidence suggests that control of blood glucose will delay or perhaps prevent diabetic complications.

What is "good control" and how does one best achieve control? The answer to this and other important questions on diabetic management will be answered in identical diabetic conferences to be held in various geographic sites in Alabama in June, August, September and October 1976. The dates and sites are given below:

June 4, 5, 1976—Joe Wheeler Lodge, Rogersville; August 6, 7, 8, 1976—Olympia Spa, Dothan; September 17, 18, 19, 1976—Lake Guntersville State Park, Guntersville; and October 2, 3, 1976—Gulf Shores State Park, Gulf Shores.

THESE conferences are sponsored by the Medical Association of the State of Alabama in conjunction with the Division of Medical Education, University of Alabama in Birmingham and are for any interested physician. There is no conference registration fee as the programs are produced with funds derived from membership dues. Each program speaker has been carefully selected and is an expert in his particular field.

Do you wish to learn more about diabetes and its management? I urge you to attend one of these conferences most convenient to you. Try it! You will like it! And so will your patients!

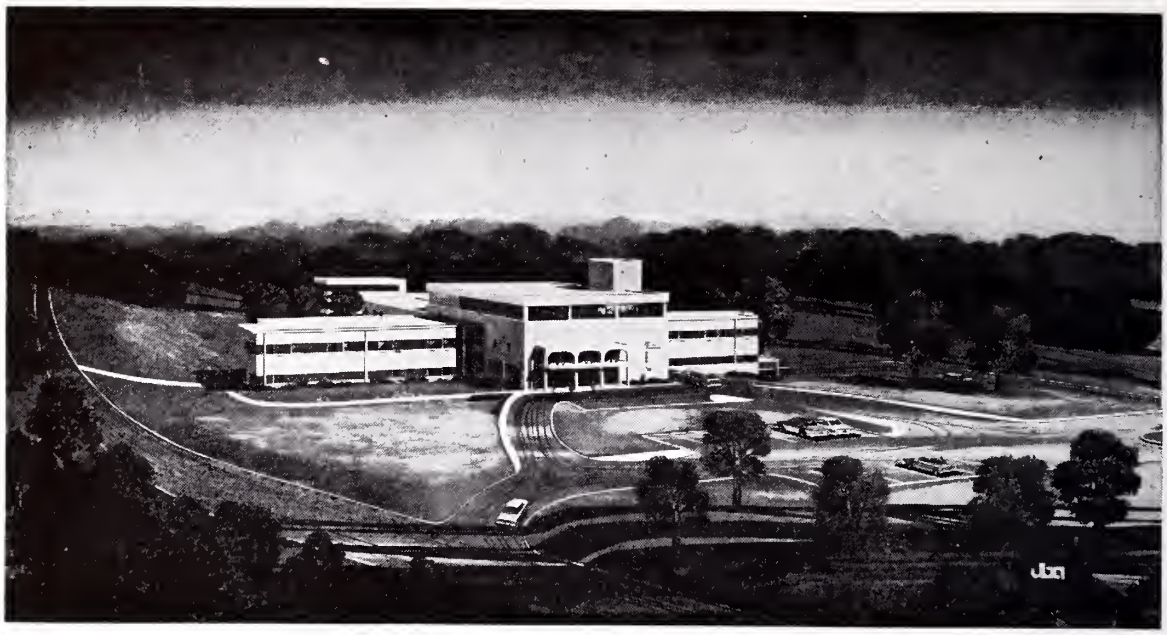
Roy F. Roddam, M.D.
Associate Professor of Medicine
Division of Endocrinology and Metabolism
University of Alabama School of Medicine
President, Alabama Affiliate of
the American Diabetes Association

editorials
editorials

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■



HILL CREST HOSPITAL — For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

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Letters to the Editor

Management of Hypertension

I received an article entitled "Comments on The Management of Hypertension-1976" which I am forwarding to you from Charles Pierce, M.D. for possible consideration for the *Journal of the Medical Association of the State of Alabama.*

This article was originally prepared by Dr. Pierce for acceptance by one of our committees of the Alabama Advisory and Coordinating Council on Hypertension. It will appear in a report we are printing by the Council, but it will not have near the distribution that the *Journal* does.

During the last meeting, it was voted by the Council to have this article submitted to you and we apologize for being a few days late. It is felt that this article follows closely the approved methods for treating hypertension and that its reproduction would be beneficial.

Cordially,
Richard 'Sparky' Adams
Hypertension Coordinator
Dept. of Public Health
Montgomery

Ed. The article was received and approved by our editorial board. It will appear in a future issue of the Journal.

Exercise Guidelines To Come

As per our phone conversation, I will be happy to prepare a manuscript on guidelines for prescribing exercise for patients with coronary disease. I will send the manuscript before the middle of July and will try to keep the length the same as most of the articles in the *Journal.* I shall certainly contact you if I have any further questions.

Thanks for your help.

Sincerely,
Albert Oberman, M.D.
Heart Evaluation Clinic
UAB School of Medicine

Alcoholics: A Chance To Quit

In spite of the education and training of doctors, they do become "alcoholics," even though they may never see skidrow. Alcoholism appears to happen to people who do not want it—even doctors.

Because of the fact that there are undoubtedly alcoholics among your membership, will you please publish the following information:

INTERNATIONAL DOCTORS IN ALCOHOLICS ANONYMOUS is a non-dues-paying organization of PHYSICIANS AND DENTISTS who get together at least yearly to help each other obtain and maintain their sobriety and freedom from drugs. The next annual convention will be held at the new Los Angeles Marriott Hotel, August 5–8, 1976. Tax deductible. Inquirers and newcomers welcome. For information write: Secretary, IDAA, 1950 Volney, Youngstown, Ohio 44511.

Thank you for this service to your membership.

Sincerely,
Luke Reed, M.D., Secretary
International Doctors In Alcoholics Anonymous
Youngstown, Ohio

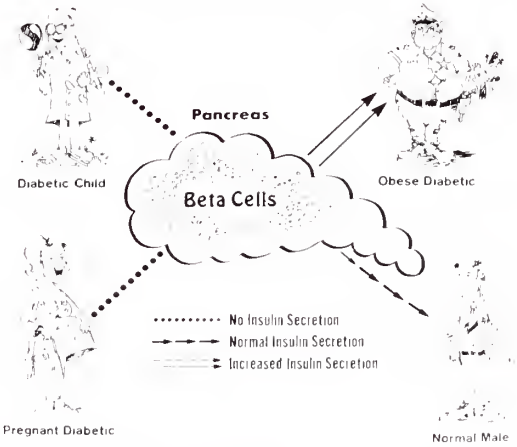
Kudos To MASA Staff

As one who can readily appreciate an efficient, dedicated, and professional staff, I would like to take this opportunity to state that the MASA Staff is without a doubt, the most energetic, loyal, and one of the hardest working of any that I have seen.

I worked with the Medical Association of Georgia, traveled five states with the American Medical Association as a Field Representative, and in my opinion MASA ranks right at the top as far as quality people are concerned. You are to be commended for putting together such an excellent group of people.

One only has to observe an annual meeting to appreciate such a staff. I am sure that all of the members of MASA certainly share my feelings.

Sincerely,
Wallie R. Carpenter
Executive Director
Jefferson County Medical Society ■



about the cover... MASA's Education Council is sponsoring its second "regionalization" cme effort in four different sections of Alabama this summer. The topic chosen by the Council is "diabetes mellitus," an ailment which crosses specialty lines, is relatively common and is of general interest to the practicing physician. Special thanks go to Dr. Roy F. Roddam, Associate Professor of Medicine, UAB, and UAB artist, Rod Powers, and the Diabetes Hospital for their combined efforts in making our front cover possible this month.

Anesthesia—American Discovery

A UNIQUE and highly important American contribution to medicine was the first use of ether as an anesthetic for surgery.

Prior to the 1840s, surgery and dentistry were grim affairs. There was no dependable means of relieving pain during the operation. A stiff drink of strong alcoholic beverage was the surgeon's major anesthetic, and this did not actually prevent pain. The surgeon had to learn to work very fast to get it over with before the patient succumbed to shock or loss of blood, while his patient was strapped to the operating table. Surgery was the last resort—to be avoided if at all possible.

A young Georgia physician, Crawford W. Long of Jefferson, Georgia, was the first man to use ether for surgical anesthetic other than a dental procedure. On March 30, 1842, Dr. Long used ether to remove two small tumors from the neck of a friend. The operation was successful and the patient suffered no pain.

OTHER pioneering work was underway in New England, and a report appeared in a Boston journal in 1846. The published report was promptly attacked as "quackery" and a lively exchange in the medical literature ensued for a time until the value of ether as an anesthetic was proved to the satisfaction of the medical community of the day.

One of the New Englanders who did the first experiments with ether, Dr. W. T. G. Morton, gave us his dental practice to devote full time to anesthesia, and is most likely the first professional anesthetist in American medicine.

From America the news spread to Europe in 1846 and the European surgeons were quick to take up the use of ether. Dr. Long, early in his work, began using ether to relieve the pains of childbirth. This precipated a moral argument from clergymen and many physicians that childbirth pains were something that should be endured, but this eventually passed.

ODDLY, ether first came to the attention of medical men through its use by sideshow entertainers. These men traveled about the country giving demonstrations by having men in the audience inhale ether and become pleasantly drunk. Ether parties became the vogue among young persons who inhaled the substance at parties. Probably its first use as an anesthetic was in January, 1842, when a young chemist who had been to some of the parties administered ether to a young woman dental patient.

It was after a public demonstration that Dr. Long got the idea of administering ether to a patient to operate without pain. Dr. Long had witnessed ether parties while a medical student at the University of Pennsylvania.

It was Dr. Oliver Wendell Holmes who suggested the name "anesthesia" for the pain-free condition and "anesthetic" for the substance that induced anesthesia.

At the founding meeting of the American Medical Association in Philadelphia in 1848, the subject of anesthesia was prominent on the scientific program. Physicians from throughout the United States learned of the discovery at the convention, and use of ether spread rapidly thereafter. Some surgeons still were reluctant to use ether in their operations, but the Committee on Surgery of that first AMA meeting declared that the benefits offset the risk. ■

PREPARED BY THE AMA

A Woman's Surgeon

Dr. J. Marion Sims

by Robert S. Sparkman, M.D., F.A.C.S., Dallas, Texas

On THE EARLY MAPS of South Carolina, in the south of Lancaster County, there appears the name "Hanging Rock." This is derived from a peculiar geological formation which is situated on the steep bank of a little creek. It is a familiar landmark. On a nearby farm the first child of Jack and Mahala Sims was born on January 25, 1813. They named him James Marion in honor of Carolina's revolutionary hero, General Francis Marion, the Swamp Fox.

The father, Jack Sims, had little money and no formal education, but he was ambitious and enterprising. In 1825, seeking a better opportunity, he moved with his family to Lancaster where he achieved enough success as a tavern keeper, surveyor, and sheriff to educate his son. Marion was an undistinguished student. After an education of sorts in rural schools and in the new Franklin Academy in Lancaster, he enrolled in 1830 in South Carolina College at Columbia. He graduated in 1832 and returned to Lancaster. As a college graduate he was expected to enter one of the professions. His father wanted him to be a lawyer, while his mother wanted him to be a minister. He chose medicine as a career, not because he liked it, but because the alternatives of law and the church appealed to him even less. His choice was a disappointment to both his parents.



1813 - 1883

HE BEGAN BY READING medicine with an indifferent preceptor, Dr. Churchill Jones, in Lancaster. In 1833 he attended a three-month course of lectures in Charleston at the new Medical College of South Carolina. After additional reading in Lancaster he enrolled in the Jefferson Medical College in Philadelphia, where he spent a year. During this phase of his career he was greatly influenced by two of his teachers, Dr. Granville Pattison and Dr. George McClelland. He graduated in 1835 and returned to Lancaster to practice.

His experience there was a disaster. In two months he had only two patients: both were infants, and both died of cholera infantum. In desperation, Sims packed his belongings and fled westward to Alabama. During the next five years a number of things happened to influence his career profoundly. He established a successful practice at Mount Meigs, a few miles east of Montgomery. Malaria was endemic there, and before long Sims was debilitated by recurrent bouts of fever.

Despite his infirmity, at the close of 1836 he returned to Lancaster long enough to marry his childhood sweetheart, Theresa Jones, and to bring her back with him to Mount Meigs. In 1838, seeking a healthier climate, they moved to Cubahatchee in Macon County, but this area proved to be even worse. In 1840 they finally settled in Montgomery, the big city.

SIMS WAS THEN 27 years of age. It was in Montgomery that he achieved his destiny to become a surgeon. As his health improved he began to operate upon a great volume and variety of cases. He was courageous and inventive. His technical skill and confidence developed rapidly, as did his reputation. He operated successfully for cross-eyes, club foot, hare-lip, and for tumors of the jaw and maxilla. His first publication, on the cure of hare-lip, appeared in 1844, and others soon followed. For the first time in his career he was truly interested in his work. In 1845 Sims first ventured into woman's surgery, an undeveloped field which up to that time had been of no interest to him. He discovered that by placing the patient in the genupectoral or knee-chest position and inserting a speculum of his own design, he was able to see the vaginal walls and cervix with a degree of thoroughness and clarity that had not previously been possible. He devised his first speculum by bending the handle of a large pewter spoon. Later he modified it into a sigmoid of "duck-billed" shape. Illumination was accomplished with sunlight reflected from a mirror. Ultimately he modified the awkward knee-chest position to develop the lateral Sims position, which was equally effective but much more comfortable for the patient.

Within a period of two months Sims was asked to see three young slave girls, Anarcha, Lucy, and Betsy, each of whom was totally incapacitated by vesico-vaginal fistula, a complication of prolonged childbirth. No instance of cure of this condition had ever been reported, although there had been many unsuccessful efforts by other surgeons to close such defects.

SIMS ADMITTED the three young women to a hospital he had built in back of his office and began a series of operations, utilizing original techniques and instruments of his own design. Other women suffering from the same condition were also admitted, and soon it was necessary for him to enlarge his hospital. All the patients were kept there at his own expense.

Each time he closed a fistula with silk sutures it became inflamed and broke open again. He devised other procedures and other instruments, including a self-retaining catheter, but each new effort failed. This went on for almost four years.

Finally he had the local jeweler make him some fine wire of pure silver. Using this as sutures instead of silk, he operated upon Anarcha for the thirtieth time! Within a

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week the fistula had healed. Soon the other patients were cured by the same procedure. This surgical triumph insured Sims' fame.

AT ABOUT THIS TIME misfortune struck again in the form of recurrent illness. In 1849 he developed a severe form of endemic acute diarrhea which became chronic and which disabled him for most of the next four years. He visited many places, seeking a healthier climate.

Finally, in 1853, he moved with his wife and six children to New York. He was then 40 years of age. He bought a large home at 79 Madison Avenue, in a newly developed area between 28th and 29th Streets. It served both as a dwelling and as a private infirmary. Sims' health and vigor soon were restored and there was never any recurrence of his colitis.

The publication that same year of his first paper on the cure of vesico-vaginal fistula brought him to the attention of the physicians of New York and provided him with sources of patient referral. His practice grew rapidly.

From the beginning of his New York career Sims had been obsessed with the ambition that a special hospital be established for the treatment of women's diseases. As a result of his persuasive appeals to prominent citizens and their wives, such a hospital became a reality within two years after Sims's arrival in New York. The first Woman's Hospital opened its doors on May 4, 1855. This new four-story house was equipped with 40 beds and was situated at 83 Madison Avenue, near Sims' home. Most of the beds were occupied by indigent patients.

WITHIN A YEAR, work at the hospital had become so heavy that it was necessary to engage an associate. Sims chose a young Virginian named Thomas Addis Emmet. In the years that followed he and Sims devised or improved many pelvic operations. Emmet kept a journal with case reports, and made detailed colored drawings of the operations.

The year 1861 and the outbreak of the Civil War brought new problems to Sims and his family. They were alien southerners, living in the north. Sims' solution to this dilemma was to take refuge in Europe, leaving Emmet to run the Woman's Hospital.

Sims' success in Europe was spectacular. He became an itinerant surgeon, practicing in England, France, Germany, and Italy. Soon he was well known and highly regarded by the leading surgeons of Europe. His patients included a duchess, a countess, and the Empress Eugenie of France, wife of Napoleon III.

Within a year he had brought his family to live with him in Paris. Some of his fees were staggering, but he lived and entertained expensively and never succeeded in accumulating any substantial reserve of money.

Sims' European success was marred by a personal tragedy. His eldest son Granville, named for Dr. Granville Pattison of the Jefferson Medical College, had finished his medical studies in Paris and gave promise of becoming a worthy successor to his father. It was Sims' fondest ambition that Granville should carry on his work.

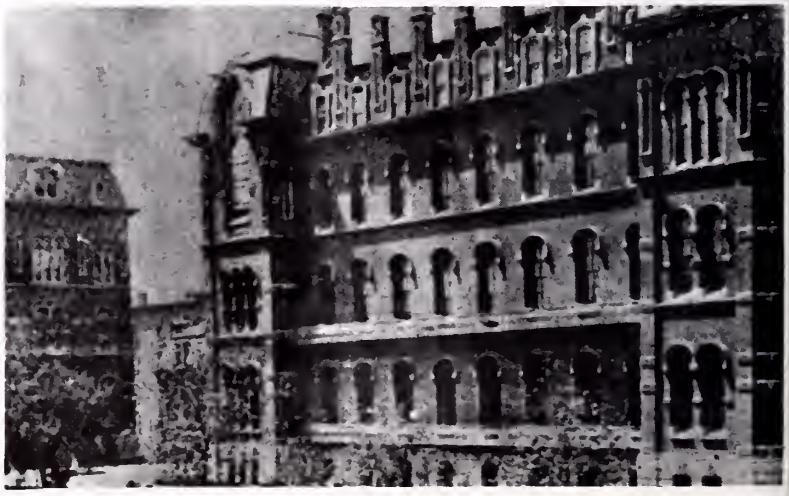
HOWEVER, THROUGHOUT the Civil War Granville's sympathies had been with the south and he felt that it was his obligation to join them and become personally involved in the conflict. His father opposed the idea, but Granville was resolute.

In 1864 he sailed to Havana, where he awaited a boat that would run the Union blockade and deliver him to Galveston, Texas. He finally reached Galveston, but died of yellow fever less than twenty-four hours after arriving there. The loss of Granville was one of the great disappointments of Sims' life.

In the autumn of 1867 a new Woman's Hospital was opened at Fiftieth Street and Fourth Avenue, an area which had served as a potter's field during the cholera epidemic of 1832. The following year, after an absence of seven years, Sims returned with his family to New York. He became chief consulting surgeon to the new hospital and resumed some practice. However, for the remainder of his life he continued to maintain practices in England, France, and Germany, and to commute between these countries and the United States.

ALTHOUGH SIMS SUFFERED from chronic, recurrent broncho-pulmonary disease during his last years, he was able to remain professionally active until the very end of his life. On November 12, 1883, he performed a difficult operation upon a prominent New York woman, having postponed sailing for Europe in order to do so.

The Woman's Hospital In 1867, Present Site Of The Waldorf Astoria Hotel, Park Avenue.



Three hours after midnight, on November 13, he died suddenly in his New York home at the age of 70. An autopsy was performed by William H. Welch, then a new pathologist at the Woman's Hospital, and by a Dr. Peabody. In addition to old pleural and pericardial adhesions, he was found to have "obstruction of the circulation from atheromatous degeneration of the coronary arteries."

Even in the manner of his death he achieved a measure of medical distinction, since he was only the second individual in the United States in whom a post-mortem diagnosis of coronary occlusion had been recorded.

An excellent biography of Sims was published in 1950 by Dr. Seale Harris of Birmingham. It was entitled *"Woman's Surgeon."* True enough, Sims is remembered principally as a woman's surgeon, and had he made no contribution other than in gynecology, his fame would still have been assured. However, an important facet of his career that has received insufficient emphasis are his three major contributions to general surgery.

THE FIRST OF THESE was in the field of surgery of the biliary tract. On April 18, 1878, in Paris, Sims performed the first premediatated operation on the gallbladder. The patient, a woman of 45, had suffered for months from severe jaundice, itching and fever, and had developed a mass that filled her right upper abdomen.

At operation Sims opened the distended gallbladder, removed 60 stones, and sutured the fundus into the abdominal incision, placing a glass tube in it for drainage. He coined the term "cholecystotomy" for the procedure. The patient developed intestinal hemorrhages and died on the eighth day, probably from a prothrombin deficit. Sims' account of the operation was published in England, in France, and in the United States. He urged that gallbladder operations be performed earlier in the disease.

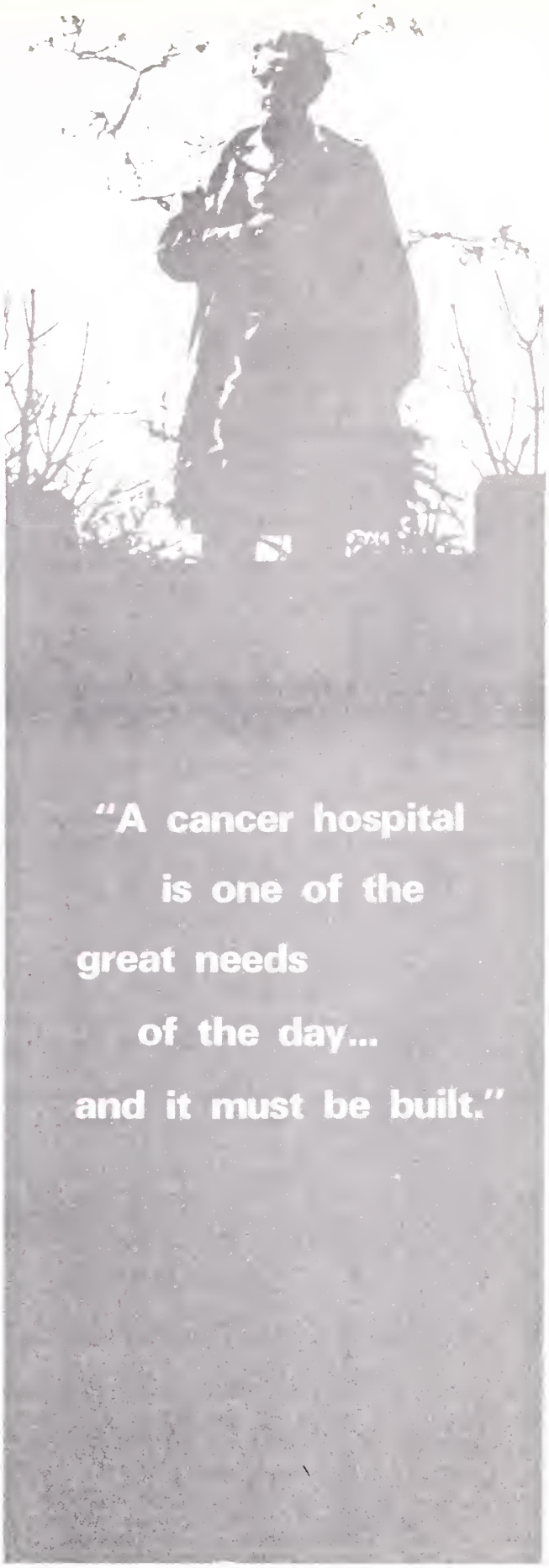
He and his contemporaries were unaware that John S. Bobbs of Indianapolis had operated successfully upon the gallbladder in 1867, eleven years before. Nevertheless, his much-publicized operation and his recommendations opened up a new field of surgery, and within three years Lawson Tait had reported five successful cholecystotomies.

Sims' second great contribution to general surgery was in treating of gunshot wounds of the abdomen. On July 2, 1881, President Garfield was shot twice by an assassin. One pistol bullet struck him in the arm, while the other entered the right side of his back and did not emerge. In keeping with accepted practice, no abdominal operation was performed. Garfield lived 69 days and finally died of a ruptured aneurysm of the splenic artery.

Partly as a result of his experiences in the Franco-Prussian War, Sims had come to believe that penetrating gunshot wounds of the abdomen could best be treated by operation.

IN A TELEGRAM from Paris he stated, "if the President had recovered from the shock, and if there is undoubted evidence that the ball has traversed the peritoneal cavity, his only safety is in opening the abdomen, clearing out the peritoneal cavity, tying bleeding vessels, suturing wounded intestine, and treating the case as we would after ovariotomy, using drainage or not as circumstances require."

Two weeks after Garfield's death Sims made his last address to the New York Academy of Medicine. In a



CONTINUED FROM PAGE 21

Dr. J. Marion Sims

valedictory discourse entitled "Progress in Peritoneal Surgery" he outlined in detail the steps to be carried out in the surgical treatment of abdominal gunshot wounds. His remarks attracted much attention locally and elsewhere.

His presentation was subsequently published serially in six consecutive issues of the *British Medical Journal* under the title "Remarks on the Treatment of Gunshot Wounds of the Abdomen in Relation to Modern Peritoneal Surgery." For the second time Sims had opened up a new frontier of abdominal surgery.



Lever Speculum Of Sims

The third great contribution that Sims made to general surgery was not accomplished until after his death. For years he had urged, without success, that special hospitals be established for the treatment of cancer. Funds to establish such a facility had been refused twice by the Woman's Hospital.

Three weeks before his death Sims appealed once more by letter to the lay press. "A cancer hospital is one of the great needs of the day," he said, "and it must be built."

THIS LETTER, which received widespread publicity, provided the necessary impetus and was responsible to a considerable degree for the events that followed. Within a few months a committee of prominent citizens met and organized an effort to establish such a hospital.

Four years later, in 1887, the New York Cancer Hospital opened its first building, the Astor Pavilion for Women. The institution now known throughout the world as the Memorial Hospital of New York evolved from this beginning.

The remains of J. Marion Sims are interred in Lot 24546, Section 182, of the Green-Wood Cemetery in Brooklyn. Beside him is the grave of his wife, Theresa, the only woman he ever loved. On the same lot are buried his sons Willie and Harry, his youngest daughter, Florence, and her husband, the great surgeon, John Allan Wyeth.

The second Woman's Hospital is gone, replaced by the Waldorf-Astoria Hotel, but another Woman's Hospital has been established in association with St. Luke's Hospital. Appropriate historical markers have been erected at the place of Sims' birth and at the site of his Montgomery office. A bronze statue, formerly in Bryant Park, has been relocated on Fifth Avenue opposite the New York Academy of Medicine. Another statue adorns the capitol grounds of Columbia, South Carolina, while still another is situated on the capitol grounds in Montgomery, Alabama. A companion statue of Wyeth is located just a few feet away.

■



Signers of th Physician

AMONG the 56 signers of the Declaration of Independence were four practicing physicians—two famous for their work in medicine. Rush and Bartlett, and two who were better known for their political activities, Hall and Thornton. (A fifth signer, Oliver Wolcott, studied medicine for a time but never practiced.)

Benjamin Rush—whose system of bleeding in the treatment for yellow fever was denounced as "one of the great discoveries...which have contributed to the depopulation of the earth"—was probably the best-known American physician of his day, and despite some of his mistaken theories, made outstanding contributions in his field.

Josiah Bartlett's career was primarily in public affairs, but he was a notable physician as well and founder of the New Hampshire Medical Society. Lyman Hall and Matthew Thornton also practiced medicine, but most of their energy was devoted to careers as statesmen.

Matthew Thornton (c. 1714-1803) was born in Ireland and emigrated to America about 1718. He began to practice medicine in Londonderry, New Hampshire, in 1740, and was an "under-surgeon" in the New Hampshire militia under the royal government. Prominent in the agitation against the Stamp Act, he was later elected president of the provincial congrees of 1775. He was also chairman of the committee of safety that organized resistance and exercised general powers of government during the early stages of the war. He never returned to the practice of medicine, but devoted most of his remaining years to political affairs in New Hampshire.

Lyman Hall (1724-1790) began his career as a preacher in Connecticut, but he later abandoned this in favor of the study and practice of medicine. He moved with a group of New England Congregationalists to Georgia, where he practiced medicine before becoming a delegate to the Continental Congress. After the war, he returned to Georgia to practice medicine, where he was elected governor in 1783.

Josiah Bartlett (1729-1795) was a notable physician, and chief justive and governor of New Hampshire. The first to vote for adoption of the Declaration of Independence, he was one of the most influential members of the two Continental Congresses in which he served. His interest in the medical profession did not abate during his long career in public affairs, and in 1791 he secured from the state legislature a charter for the New Hampshire Medical Society.

eclaration of Independence

- Patriots

Benjamin Rush (1745-1813), despite his mistaken view that "depletion" through bleeding and purging was the one treatment for most diseases, made many important contributions to American medicine and social reform. He established the first free dispensary in the country, was probably the first to advocate the study of veterinary medicine, made notable contributions to psychiatry, and was the first medical man in the country to achieve a general literary reputation. Although a controversial figure in his medical theories, he was greatly admired as a teacher, having taught about 3,000 students in his lifetime. A major result of his instruction was the emergence of Philadelphia as the leading American center of medical training during the first half of the nineteenth century. ■

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ACCREDITED BY THE J. C. A. H.

Human dignity in living and dying

TODAY is Good Friday – the day traditionally set apart to recall the death of Jesus Christ.

It is ironic that, since the Middle Ages, we have used the word "good" to set this day apart from other Fridays, for it is difficult for most men to think of a man's death as "good."

In every culture in the world, death has been viewed as the line of demarcation between man and the gods; "all men are mortal," that's what it means to be a man – to be limited, frail, a temporary sojourner. Death is the end of man's claims to power, the final frustration to his valiant attempts to control himself and his world.

My old professor of theology, in the first lecture I heard him give, said "man is the only creature who contemplates his own death, which raises for him the question of the meaning of his life."

THAT'S THE WORK of theology – to raise the questions of the meaning of life. It is in that vein that I want to talk to you today about attitudes towards death, and how they have changed and are changing again. For the way we think about death and the way we approach living are inextricably linked; living and dying are a part of a whole, and to ponder them is what makes us distinctly human.

As far back in history as we can search, death has always been taken for granted. Man as a hunter survived by killing his fellow creatures; occasionally in his pursuit the creature won the game and killed man.

Man as a farmer lived close to nature, and knew its cycles from close observation. In the spring he planted, the summer sun brought growth, in the fall he harvested, and in winter he sought shelter from the cold and gloom that left his fields brown and bare. His animals were born, grew fat, and gave up their lives. Death was natural, it touched everything he knew. Children died, or if they were blessed, survived and prospered. Nothing was hidden, death was the inevitable course of all of nature. The sick and the old died at home, and were buried nearby by members of the family.

The worst fate was for death to slip in stealthily, and take one unawares, before one could prepare.

How strange to our modern ears is the 16th century prayer: "From sudden death, Good Lord deliver us." The thought of being caught in the midst of things, with business unfinished, words unsaid, was a dreadful fate.

IN THE MIDDLE AGES, a Pope proclaimed that it was the physician's solemn obligation to warn his patient when death was imminent, so that he could make his preparations, both spiritual and temporal.

In Roman Catholic countries, it was always the custom for good Catholics, when they saw the priest in his black robes carrying the viaticum to administer Extreme Unction, the Last Rites, to a gravely ill patient, to follow him, and join him at the patient's bedside, for a public celebration of one of the sacraments of the Church. Those who were too busy to attend crossed themselves, and said a prayer for the souls of the dying, and for themselves for the time of their own death, and hurried on. Death was public; the vigil for the dying was kept to honor the last, most sacred hours of a person's life, and by watching and listening, to prepare for the time when, inevitably, one must make his own exit.

I have a written description of the deathbed scene of my great-great grandmother, who lived in downtown Mobile. The scene was transcribed in 1848, a few days after he death, by a daughter, who had been called, along with the rest of the family and the family's slaves, for a rather dramatic family scene. Here are some of the things she said:

"My husband, you have been a good husband to me and I have tried to be a good wife to you, but at times I have had bad feelings against you. Forgive me, my husband. Be a father to my children, bring them up in the way of the Lord. Go to the house of the Lord, for remember, the Lord can save at the eleventh hour.

"**MY SON**, obey your father, and if you feel your passion arising, bite your tongue, and remember this, your mother's last hour. Try and persuade your father to accompany you to church, and if he will not go, take your sisters by the hand, and proceed hand-in-hand to church at least twice a week. Do not be partial to one sister more than the other."

"Aunt Fannie, you know I am not afraid to die."

"Joe, be a good boy, drink no more whiskey, mind your master and watch his interests and when you drive my children out to my grave, tell them of their mother. Go to church, Joe, and now remember, I want you to meet me in heaven."

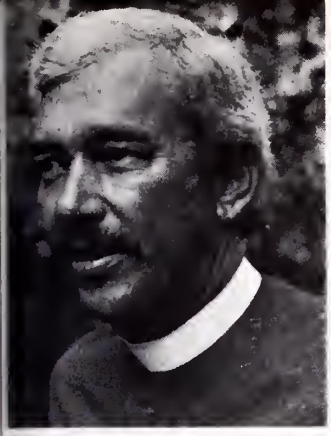
That is an intimate family scene. I have the feeling when I read it she had prepared for that for a long time; she had rehearsed her words over and over again, and was careful to have just the right thing to say to everybody. She could manage that kind of scene because she was no stranger to it – she had seen it before, probably many times, perhaps beginning in her childhood, just as many girls begin planning their wedding from the first time they catch a glimpse of a bride.

Our attitudes have changed rather drastically. According to a French sociologist, a strongly discernable shift took place somewhere between the first and second World Wars.

Up until then, death was considered tragic when the patient slipped away unprepared.

BUT FROM THAT point on, death becomes secret, hidden. The worst thing that can happen is that the patient can discover he is terminal. Patients are shunted away from their families to the Intensive Care Unit, surrounded by busy strangers and unfamiliar apparatus.

Professional undertakers have developed great skill in the art of cosmetics, so that a corpse can be made to look "lifelike," and "natural." Burials are done by professionals with backhoes, which have been carefully screened from view during the funeral.



Presented by
Reverend Benjamin B. Smith, Coordinator,
Church's Ministry to UAB, at the
President's Prayer Breakfast on April 16,
during the 1976 Annual Session.

What has happened that made that kind of impact on our attitudes?

Consider for a few moments your medical history. Beginning in 1880, a few men, like Pasteur, Koch, Metchnikoff, Roux and Behring, and Walter Reed, hovelled in their laboratories, pouring over their microscopes far into the night, isolated the microbes, identified them, learned their habits, and learned how to control them. In a very brief 21 year period, from 1880 to 1901, these men and others *virtually eliminated the major killer infectious diseases,* such as smallpox, diphtheria, tuberculosis, cholera, syphilis, malaria, rabies, yellow fever. That 21-year period can easily be called the Golden Age of Medicine, when its most exciting and promising discoveries were made. The germ theory of disease won the field. Medicine became a science.

Just a few years later, Abraham Flexner recommended rigorous standards for basic science teaching in American medical schools; the majority of schools in the country shut their doors for lack of resources to meet the new scientific standards.

THE PUBLIC REACTION was electric! If the dreaded killer diseases could be controlled by science, then it's only a matter of time, money, enough scientists, and enough laboratories, before research can produce the controls for the remaining killers: heart disease, cancer, stroke, and whatever is left over. Huxley could write his Brave New World.

The implication, of course, is that it's only a matter of time before death itself is conquered. Science could deliver what Jesus Himself had promised. And if death itself is vulnerable in only a matter to time, then the worst thing that can happen is that the new scientific optimism can be betrayed. Anything less than total victory is defeatism. We mustn't think about it, talk about it, admit that it's even there.

According to the actuarial tables, life expectancy in this country has increased dramatically, until 1950. Since then it has levelled off. The newspapers recently reported the cancer death rate is still rising, despite the billions poured into research.

If we don't have to be faced with the contemplation of our death, then we don't have to think much more about the meaning of our life.

So you see, we're all caught in a vicious cycle. Because of the past triumphs of scientific medicine, which came so rapidly and so dramatically, the public has come to expect the miraculous. And because physicians *do* maintain some of their idealism, they strive with all their energy to live up to these expectations.

THE PUBLIC IMPLICITLY believes that medical care, like Jesus, can save them from the ultimate threat: *death.* Physicians, idealistically motivated, technically competent, try not to disappoint these expectations. The result is a false sense of optimism that has prevailed far too long; a conspiracy among all of us to pretend that there is no need to face the prospect of death squarely and realistically.

Ivan Illich, the outspoken social critic from Cuernevaca, in his book Medical Nemesis, says that society has become sick – he uses the word *iatrogenesis* – sick because all of us have abdicated responsibility for our own health, and have become dependent upon the professionals. Whether we're right or wrong, we want to believe that you doctors have the secret, the magic cure; that if we placate you, cajole you, provide you with enough money and enough power, we will never again fear that final humiliation, that utter loss of self-control that comes with death.

And as long as you play along, act as if you have the magic and the power and can control the mysteries of life and death, that dependency will continue.

As you well know, dependency is a two-edged sword. It swings unpredictably from love to hate; your patients will love you, the public will hate you.

There is evidence that the tide is turning. Perhaps it began with a physician, Elizabeth Kubler-Ross. It is significant that now every medical school in the country added a new course to the curriculum, and after Dr. Kubler-Ross, most are entitled "Death and Dying."

I'D RATHER SEE it listed as "living and dying." Along with this new addition to the curriculum are a variety of courses in human values; courses that have much to do with the issues of living–human sexuality, bioethics, family care; some schools have instituted departments of humanities, with an emphasis on literature and philosophy and art–the things that enrich and enhance the process of living.

From my perspective, human values are basically *religious.* To be *human,* truly human, is to contemplate the inevitable approach of death; therefore, to ponder how best to live life filled with meaning.

It is to see in every human being, no matter how pathetic, how obstinate, the image of God who created him and who inexorably presides over his destiny; who in a moment of His own choice will call him back.

Death as the culmination of human life, the final act in the drama, the completion of what it means to be human. A time of human dignity. ■

The world in miniature



Orientals started it all. A few centuries ago, the Japanese began collecting trees that had been dwarfed by nature. Collecting developed into cultivating. East eventually met West, and today bonsai (pronounced "bone-sigh") culture is an art practiced the world over.

Dr. Thomas M. Chase, Opelika obstetrician-gynecologist, grows bonsai trees as a hobby and, as the JOURNAL discovered, he is quite proficient with this skill.

Dr. Chase is a graduate of the UAB School of Medicine and spent seven years in the Navy prior to beginning his practice in Opelika. He and his family have their residence in Auburn.

His interest in the bonsai (literally, "tray trees") began while he was in the Navy through his appreciation of Oriental art. He learned his skills in bonsai at Pensacola Junior College—an adult evening course—during his final year in the Navy.

Once he moved to Auburn, Dr. Chase started developing bonsai trees and today he has a collection that any bonsai fancier would relish.

JOURNAL: Dr. Chase, can you tell us a little of the history of bonsai and its purpose in being a miniature?

DR. CHASE: Scholars tell us there are literary writings and scrolls of what we now call bonsai found in China as early as 265 A.D. and in Japan about 1360 A.D. The Orientals admired the little gnarled and withered trees high on their mountains. They seemed to symbolize courage and success in overcoming obstacles and hardships, developing character and rugged beauty. It naturally followed that the trees were grown in containers so that they could be enjoyed even more in an individual's home.

JOURNAL: Is this the reason for its small and often "flowing" shape?



Dr. Chase prunes his favorite bonsai to attain a flowing, "freedom of flight" imagery to its form.

DR. CHASE: Yes. Its purpose is to artistically attain the "illusion of age" in the form of a tree's natural development patterns by pruning the branches and proportionately pruning the roots.

One may prune the branches so as to expose two-thirds of the trunk system. Branches may be thinned as the tree grows to allow for an imaginary "freedom of flight" throughout the tree.

JOURNAL: Exactly how does one cultivate a dwarf tree?

DR. CHASE: The intent is to expose surface roots which gives the appearance of holding the tree to the earth or its container. The tree may be potted in a tray-like container which will allow for free drainage of water. The containers are generally made of Japanese clay and may be purchased at any import or bazaar store or nursery.

Soil mixture should also allow for adequate drainage. Mixtures may vary but trees seem to do well in a soil of one-third kitty litter, one-third chick grit or ground oyster shells, one-third potting soil, and a handful of peat moss.

Adequate drainage is assured by placing wire covers over drainage holes and filling the bottom of the tray with rocks. The soil mixture can be attractively protected by various mosses and ground covers collected in the woods or along creek banks.

Rocks may be used to create the illusion of mountains. No other decorative items are allowed.

JOURNAL: Actually, Dr. Chase, isn't it correct to say that the cultivation of bonsai is the reproduction of nature?

DR. CHASE: True, and their formation must follow nature's ways.

The shaping of bonsai is much the same as trimming a poodle or wiring to straighten teeth for a certain shape. Bonsai are naturally restful miniatures. Very soon they begin to reflect their owners. They grow as they are permitted to. Color, form, line and texture present unlimited challenges to the bonsai enthusiast.

JOURNAL: What about the care of bonsai trees?

DR. CHASE: Well, they are mainly outdoor plants and may require watering up to two or three times a day when weather is windy or hot. Next, general fertilizer and appropriate bug sprays must be used from time to time.

JOURNAL: Has bonsai caught on in Alabama to any great extent?

DR. CHASE: I believe there exists a wide field in Alabama for those interested in pursuing the hobby. For those interested, I would recommend that they join the International Bonsai Club, P. O. Box 1032, Los Altos, California, 94022, as an excellent way to get started. I personally would be interested in hearing from any other Alabama physicians who are interested in bonsai. ■

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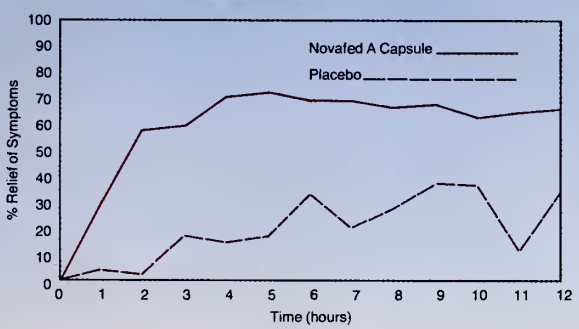
Prompt onset of effect is followed by full 12-hour relief.

(Please refer to the following page for bioavailability studies and prescribing information.)



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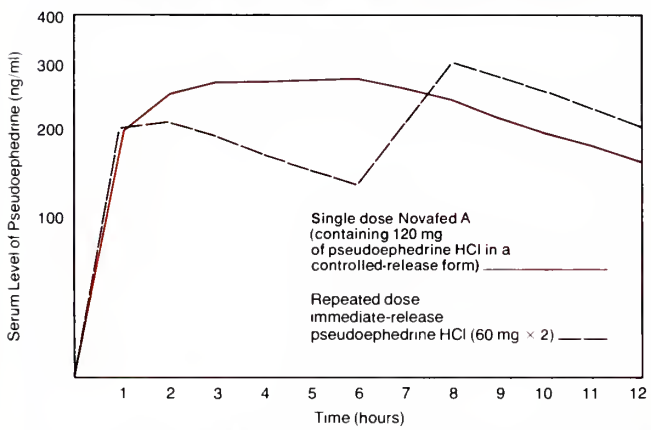
Prompt onset and sustained serum levels over 12 hours.

A bioavailability study confirmed that the sustained 12-hour action of Novafed A was comparable to that of immediate-release medication taken at 6-hour intervals.

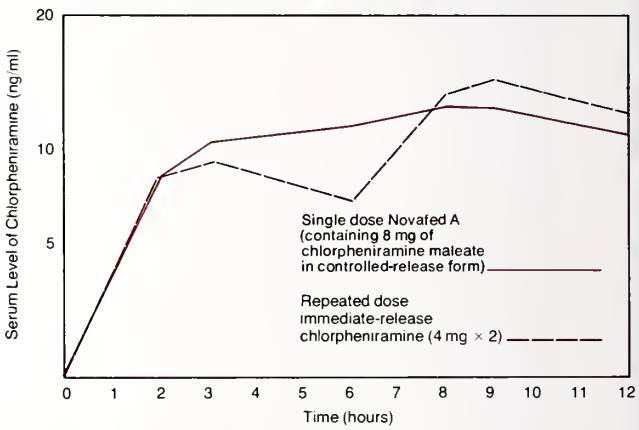
The chart at the left shows the serum levels of pseudoephedrine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 60 mg. pseudoephedrine hydrochloride in an immediate-release form. Serum levels of pseudoephedrine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

The chart at the right shows the serum levels of chlorpheniramine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 4 mg. chlorpheniramine maleate in an immediate-release form. Serum levels of chlorpheniramine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

Comparison of Mean Serum Levels of Pseudoephedrine Following Novafed A and an Immediate-Release Reference Formulation*



Comparison of Mean Serum Levels of Chlorpheniramine Following Novafed A and an Immediate-Release Reference Formulation*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DESCRIPTION: Each NOVAFED A capsule contains 120 mg. of pseudoephedrine hydrochloride and 8 mg. of chlorpheniramine maleate. The specially formulated pellets in each capsule are designed to provide continuous therapeutic effect for about 12 hours. Nearly one-half of the active ingredients is released soon after administration and the remainder is released slowly over the remaining time period.

ACTIONS: NOVAFED A combines the action of a nasal decongestant, pseudoephedrine hydrochloride, and an antihistamine, chlorpheniramine maleate. These ingredients are combined to provide prompt and sustained nasal and upper respiratory decongestant and antihistaminic action.

INDICATIONS: NOVAFED A is indicated for the relief of nasal congestion and eustachian tube congestion associated with the common cold, sinusitis and acute upper respiratory infections. It is also indicated for perennial and seasonal allergic rhinitis, vasomotor rhinitis, allergic conjunctivitis due to inhalant allergens and foods and for mild, uncomplicated allergic skin manifestations of urticaria and angioedema. Decongestants in combination with antihistamines have been used for many years to relieve eustachian tube congestion associated with acute eustachian salpingitis, aerotitis media, acute otitis media and serous otitis media. NOVAFED A may be given concurrently, when indicated, with analgesics and antibiotics.

CONTRAINDICATIONS: Symphathomimetic amines are contraindicated in patients with severe hypertension, severe coronary artery disease, and in patients on MAO inhibitor therapy. Antihistamines are contraindicated in patients with narrow-angle glaucoma, urinary retention, peptic ulcer, during an asthmatic attack, and in patients receiving MAO inhibitors.

Children under 12: NOVAFED A controlled-release capsules should not be used in children less than 12 years of age.

Nursing Mothers: Pseudoephedrine is contraindicated in nursing mothers because of the higher than usual risk for infants from sympathomimetic amines.

Hypersensitivity: This drug is contraindicated in patients with hypersensitivity or idiosyncrasy to sympathomimetic amines or antihistamines. Patient idiosyncrasy to adrenergic agents may be manifested by insomnia, dizziness, weakness, tremor or arrhythmias.

WARNINGS: Sympathomimetic amines should be used judiciously and sparingly in patients with hypertension, diabetes mellitus, ischemic heart disease, increased intraocular pressure, hyperthyroidism, or prostatic hypertrophy. Sympathomimetics may produce central nervous system stimulation and convulsions or cardiovascular collapse with accompanying hypotension.

Antihistamines may impair mental and physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery, and mental alertness in children. Chlorpheniramine maleate has an atropine-like action and should be used with caution in patients with increased intraocular pressure, hyperthyroidism, cardiovascular disease, hypertension or in patients with a history of bronchial asthma.

Do not exceed recommended dosage.

Use in Pregnancy: The safety of pseudoephedrine for use during pregnancy has not been established.

Use in Elderly: The elderly (60 years and older) are more likely to have adverse reaction to sympathomimetics. Overdosage of sympathomimetics in this age group may cause hallucinations, convulsions, CNS depression, and death. Therefore, safe use of a short-acting sympathomimetic should be demonstrated in the individual elderly patient before considering the use of a sustained-action formulation.

PRECAUTIONS: This drug should be used with caution in patients with diabetes, hypertension, cardiovascular disease and hyperreactivity to ephedrine. The antihistaminic may cause drowsiness and ambulatory patients who operate machinery or motor vehicles should be cautioned accordingly.

ADVERSE REACTIONS: Hyperreactive individuals may display ephedrine-like reactions such as tachycardia, palpitations, headache, dizziness, or nausea. Patients sensitive to antihistamines may experience mild sedation.

Sympathomimetic drugs have been associated with certain untoward reactions including fear, anxiety, tenseness, restlessness, tremor, weakness, pallor, respiratory difficulty, dysuria, insomnia, hallucinations, convulsions, CNS depression, arrhythmias, and cardiovascular collapse with hypotension.

Possible side effects of antihistamines are drowsiness, restlessness, dizziness, weakness, dry mouth, anorexia, nausea, headache and nervousness, blurring of vision, heartburn, dysuria and very rarely, dermatitis.

DRUG INTERACTIONS: MAO inhibitors and beta adrenergic blockers increase the effect of sympathomimetics. Sympathomimetics may reduce the antihypertensive effects of methyldopa, mecamylamine, reserpine and veratrum alkaloids. Concomitant use of antihistamines with alcohol, tricyclic antidepressants, barbiturates and other central nervous system depressants may have an additive effect.

DOSAGE AND ADMINISTRATION: One capsule every 12 hours. Do not give to children under 12 years of age.

CAUTION: Federal law prohibits dispensing without prescription.

HOW SUPPLIED: NOVAFED A is supplied in red and orange colored hard gelatin capsules, monogrammed with the Dow diamond followed by the number 109, in bottles of 100.

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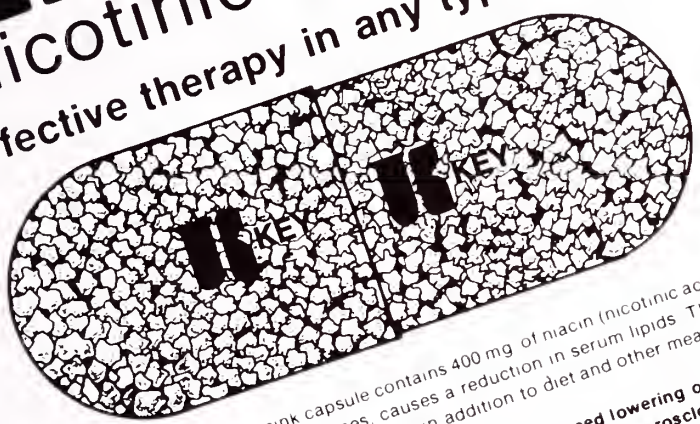
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ACTIONS: Niacin, in large doses, causes a reduction in serum lipids. The exact mechanism of action is unknown

INDICATIONS: As adjunctive therapy in addition to diet and other measures in the treatment of hypercholesterolemia and hyperbetalipoproteinemia

Notice: It has not been established whether drug-induced lowering of serum cholesterol or other lipid levels has a detrimental, a beneficial or no effect on the morbidity due to atherosclerosis or coronary heart disease. Several years will be required before current investigations can yield an answer to this question.

CONTRAINDICATIONS: Niacin is contraindicated in patients with hepatic dysfunction or in patients with active acute peptic ulcer

WARNINGS: The use during pregnancy and lactation or in women of childbearing age requires careful weighing of potential benefits versus possible hazards to the mother and child. There are insufficient studies done for usage in children

PRECAUTIONS: Patients with diabetes, gall bladder disease, past history of jaundice, liver disease, or peptic ulcer should be observed closely. At initial stage of therapy, liver function and blood glucose should be monitored at frequent intervals. Adjustment of diet and/or hypoglycemic therapy may be necessary. Patients undergoing antihypertensive therapy may experience an added vasodilating effect with resulting postural hypotension. Use with caution in patients predisposed to gout

ADVERSE REACTIONS: Severe flushing, decreased glucose tolerance, activation of peptic ulcer, abnormal liver function tests, jaundice, gastrointestinal disorders, dry skin, pruritus, hyperuricemia, toxic amblyopia, hypotension, transient headache

DOSAGE AND ADMINISTRATION: The dose and frequency for the administration of NICO-SPAN should be adjusted to the response of the patient. Slow build-up of dosage in gradual increments is recommended to observe efficacy and/or adverse effects. One or two capsules three times a day is the usual dosage. The maximum daily dosage is 6 grams

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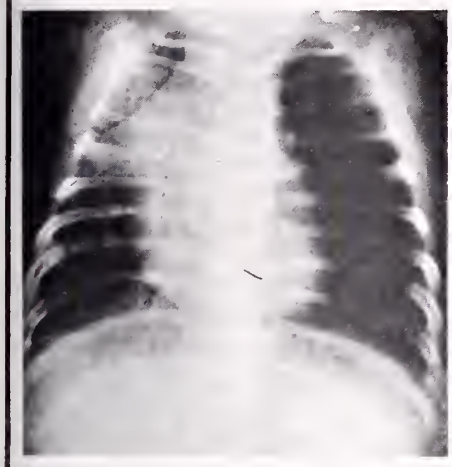
Ampoules, equivalent to 250 mg., 500 mg., 1 Gm., and 10 Gm. of cefazolin



Lilly

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600062





Far Left:
FIGURE 1-A
Chest X-Ray
Patient DM

Left:
FIGURE 1-B
Esophogram
Patient DM

Surgically Treatable Asthma

Dana M. Brasfield, M.D., and Ralph E. Tiller, M.D.*

INTRODUCTION

Recurrent wheezing is a common pediatric problem. Various definable etiologies exist such as cystic fibrosis, alpha 1 antitrypsin deficiency, immunodeficiency, viral pneumonias and congenital heart disease. Other lesions may be congenital and/or anatomic and are potentially correctable.

This review of patients is presented to bring attention to correctable causes of wheezing in children, among these are bronchogenic cysts, vascular ring, gastroesophageal reflux, enteric cysts and tracheal tumors. In the majority of cases, surgical correction of these anatomic defects relieves the recurrent respiratory problem. These particular patients were selected from a larger group because of available followup information.

CASE REPORTS

Case 1

DM (Patient No. 094381-1) was an 8-week-old female referred for evaluation of respiratory distress. She was the 5 pound product of a 36 week gestation with a caesarian delivery. At home, the patient was noted to have daily episodes of respiratory distress characterized by retractions, cyanosis and tachypnea. Initially, these were associated with feeding and crying.

The physical examination revealed a pale infant with perioral cyanosis, nasal flaring, tachypnea, intercostal retractions and diminished breath sounds over the left chest. Weight was below 3%, height was 25%. The chest xray showed overdistention. Arterial blood gases revealed hypoxemia. Repeat chest xray and fluoroscopy showed severe overdistention of the left side with a shift of the mediastinum to the right (Fig 1a).

An esophagram showed a lobulated middle mediastinal mass impressing the upper esophagus on the left and extending from T3 to T6. (Fig. 1b). There were no anomalies of the vertebral bodies. Surgical excision of the mass was performed without complications. The mass proved to be a bronchogenic cyst. Telephone followup information obtained 5 months after surgery indicated there had been no recurrence of symptoms.

Discussion

Mediastinal bronchogenic cysts are congenital lesions derived from the primitive foregut. Maier has classified the cysts according to their location as (1) tracheal (2) hilar (3) carinal (4) esophageal.[1] Typically, the cyst arises from the carina and commonly displaces the esophagus. It may appear as a sharply defined noncalcified mass which does not change appreciably in size over a period of observation. The symptomatology depends on the location and size of the mass.

Compression of the tracheobronchial tree may produce severe respiratory symptoms early on. However, in one series the average age at diagnosis was 20 years and the majority of patients was asymptomatic.[2] Chest xrays, fluoroscopy and esophagrams are sufficient to make the diagnosis. Surgical excision is the treatment of choice.

Case 2

CB (Patient No. 0365437) was a four-year-old female with recurrent respiratory problems characterized by chronic productive cough and intermittent wheezing. An esophagram showed a vascular ring. This was confirmed by cardiac catheterization which revealed a right aortic arch and left ligamentum arteriosum. The physical examination was normal.

Repeat esophagram (Fig. 2a) showed the vascular ring with a large posterior defect on the right and displacement

*Department of Pediatrics, School of Medicine, The University of Alabama in Birmingham, and The Children's Hospital, Birmingham, Alabama. (Funded in part by a grant from the Cystic Fibrosis Foundation)

FIGURE 2-A
Esophagram
Patient CB

The authors are grateful to Drs. Walter Cain and Luther Longino for allowing them to include their patients. Reprint request to Dr. Brasfield: 1601 6th Avenue, South Birmingham, Alabama 35233.

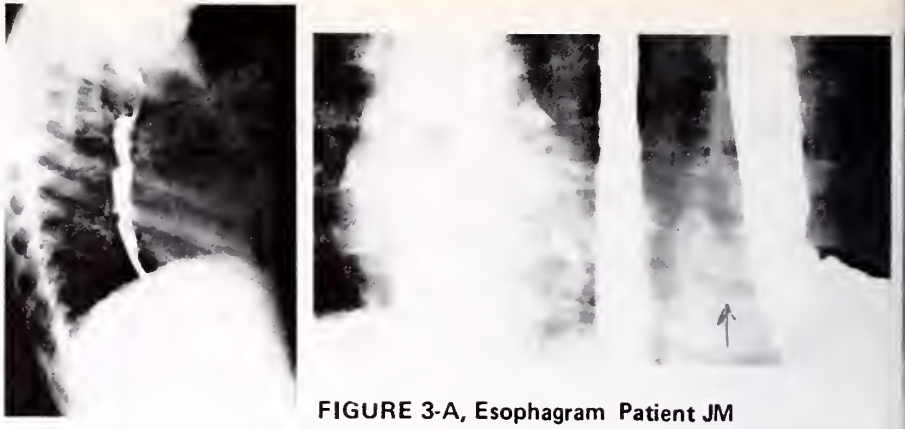


FIGURE 3-A, Esophagram Patient JM

of the trachea and esophagus anteriorly. Surgical correction was performed without complications. Telephone followup information obtained 3 years after surgery indicated there had been no recurrence of symptoms.

Discussion

Abnormalities of the aortic arch may produce respiratory distress by compression of the tracheobronchial tree. Various anomalies occur and include (1) double aortic arch, most common[3, 4] (2) right aortic arch with left ligamentum or ductus arteriosum (3) anomalous left pulmonary artery (4) anomalous right subclavian. The possibility of these anomalies should be considered in any infant with persistent stridor or recurrent respiratory distress characterized by wheezing.

The diagnosis of a vascular ring may be suspected on the plain chest xray by localized indentation or anterior displacement of the lower one-third of the trachea.[3] The barium swallow will document the presence of the vascular ring by demonstrating various indentations of the esophagus.

Indentations of both the trachea and esophagus are produced by types 1 and 2. Type 3, also known as pulmonary sling, may appear as a mass lesion between the trachea and esophagus.[3] The anomalous right subclavian produces indentation of the esophagus only and is not a cause of respiratory distress.[3,4] Fluoroscopy and an esophagram will identify vascular anomalies obstructing the trachea and esophagus.

Aortography provides direct identification of the anomaly, but is not necessary since complete dissection of all vascular structures is required during the surgical repair. Disappearance of symptoms may require weeks or months because of constriction deformities of the trachea produced by the ring.[4]

Case 3

JM (Patient No. 0374942) was a four-year-old male who was admitted for evaluation of recurrent pneumonia. Symptoms included nocturnal cough and epigastric pain associated with pneumonia. Physical examination was normal. Laboratory data included CBC, urinalysis and serum immunoglobulins, all of which were normal. The chest xray was normal but the esophagram showed gastroesophageal reflux (Fig. 3a). Surgical repair of the reflux was performed without difficulty. Telephone followup information obtained 3 years after surgery indicated there had been no recurrence of symptoms.

Two other male patients, ages three years and twelve years, presented with recurrent pneumonia and wheezing. Both had marked gastroesophageal reflux on esophagram. Both had uncomplicated surgical repair of the reflux. However, telephone followup three months and 3½ years respectively after the procedures revealed both patients to have persistent wheezing and recurrent pneumonias of similar severity to those prior to the surgical repairs.

Discussion

Gastroesophageal reflux is a common pediatric problem. The onset is usually within the first week of life and may be manifest by recurrent vomiting.[5] Numerous complications may eventually occur and include esophagitis, esoophageal stricture, aspiration pneumonia, recurrent wheezing and failure to thrive.

The association of gastroesophageal reflux with recurrent respiratory symptoms in all ages of children has been repeatedly recognized.[6,7,8,9,10] These symptoms are a result of repeated aspiration of gastric contents. The diagnosis of reflux may be suspected from the clinical presentation. An esophagram will identify the reflex and/or hiatal hernia. The techniques for demonstrating the reflux involve positional changes and more detailed fluoroscopy than that required in adults and are best performed by a pediatric radiologist.[5,11]

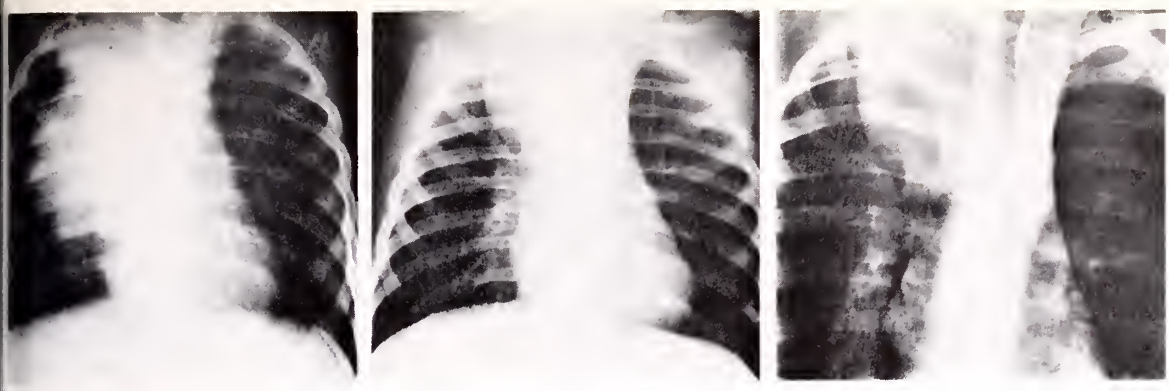
Controversy exists as to the proper management of these children.[6,9,10,12,13,14] Medical therapy consisting of continuous upright positioning, small, frequent, thickened feedings is recommended especially for the smaller infant.[6,12] Surgical repair is usually recommended for those patients who develop esophagitis or stricture and who fail to respond to medical management.[6,13,14]

Numerous reports are given of the alleviation of recurrent respiratory symptoms after therapy for gastroesophageal reflux.[6,7,8,9,13,14] As with our group of patients not all are completely relieved of symptoms after repair.[9,14]

Case 4

DC (Patient No. 0708602) was a 20-month-old male who presented for evaluation of hypothermia of the right forearm of five weeks duration. Physical examination was normal except for hypothermia of the right forearm. The chest xray revealed a posterior mediastinal mass with a hemivertebra at T1 (Fig. 4a).

Laboratory investigation with determinations of catecholamines, VMA, esophagram, bone survey, bone marrow and pyelogram was normal. Surgical exploration identified an esophageal duplication. Incomplete resection was neces-



Far Left: FIGURE 4-A and Center FIGURE 4-B Chest X-Ray. Right: Esophagram Patient DC.

sary due to involvement of the brachial plexus. The patient was readmitted three months later with a three-week history of nocturnal wheezing. The chest xray showed overdistention. The esophagram showed displacement of the trachea (Fig. 4b, 4c).

Further investigation revealed no other cause for his wheezing. Since no further surgical procedure was possible the patient was discharged home. Telephone followup information obtained 18 months after surgery indicated occasional wheezing associated with upper respiratory infections.

Discussion

Enteric cysts are located in the posterior mediastinum, usually on the right and are attached to the esophagus. The cysts are derived from the separation of epithelial cells of the primitive foregut.[15] Commonly these cysts are associated with vertebral anomalies such as hemivertebrae, spina bifida or infantile anterior or infantile scoliosis which are located in the upper thoracic or lower cervical regions.[16]

The chest xray and esophagram suggest the diagnosis of enteric cyst however, they must be differentiated from other mediastinal masses. Surgical exploration may be necessary to provide the definitve diagnosis. Complete surgical excision is usually possible.

Case 5

SL (Patient 0390518) was a 17-year-old female who presented for evaluation of wheezing and dyspnea on exertion of five month's duration. Significant physical findings included suprasternal and substernal retractions, diffuse rales, rhonchi and wheezing. Laboratory data showed normal CBC, serum chemistries, T4, alpha 1 antitrypsin, sweat chloride, blood gases. Pulmonary function tests showed minimal obstruction.

The chest xray was normal, but upper airways xrays showed a soft tissue mass compressing the trachea at the level of the 7th cervical vertebra (Fig. 5a). Tomograms revealed no calcification of the mass (Fig. 5b). An esophagram, bone survey and pyelogram were normal. Surgical resection of the mass was performed and necessitated sacrifice of the recurrent laryngeal nerve. Miscroscopic examination identified granular cell myoblastoma. Telephone followup information 3 years later indicated residual minimal hoarseness.

Discussion

Obstruction of the trachea is more common during infancy than later childhood. This is because of congenital lesions, the likelihood of foreign body ingestion and the smaller airway being more susceptible to infectious processes. Although unusual, a tracheal tumor should be considered in patients with upper airway obstruction. The location of the tumor within the tracheobronchial tree will dictate the extent of the signs and symptoms.

Diagnosis of the tumor is suspected on clinical grounds and confirmed by combinations of fluoroscopy, esophagrams and soft tissue xrays. Definitive diagnosis depends on bronchoscopy and biopsy.[16]

SUMMARY

Recurrent wheezing is a common pediatric problem. This review of patients is presented to bring attention to the correctable anatomic defects that can produce recurrent respiratory problems in a small but significant group of children.

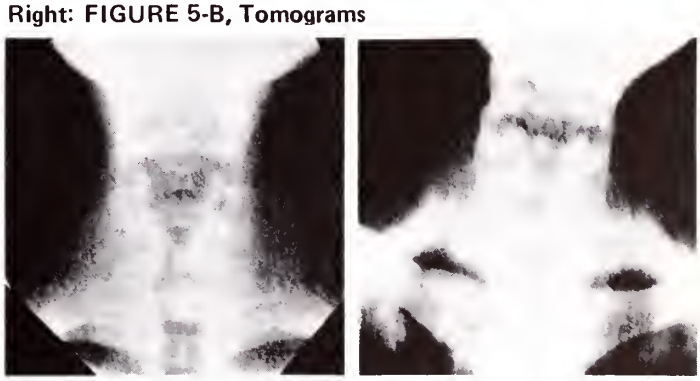
These defects include bronchogenic cysts, vascular ring, gastroesophageal reflux, enteric cysts and tracheal tumors. The diagnosis of these abnormalities is made with chest xrays, fluoroscopy and esophagrams. In the majority of cases surgical correction of these anatomic defects relieves the recurrent respiratory problem.

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CONTINUED ON PAGE 46

Patient SL. Left: FIGURE 5-A, Upper Airway Right: FIGURE 5-B, Tomograms



Oral Contraceptives: Which One For My Patient?

Betty Ruth Speir, M.D.*

AS practicing physicians in the era of the pill, we are often perplexed when a patient presents and we are confronted with the decision of which pill to prescribe.

We have available more than twenty oral contraceptives from which to choose. To understand why certain pills have certain effects, to understand the differences among oral contraceptives and to approach pill problems in a rational manner, it is necessary to examine the hormonal agents contained in oral contraceptives.

There are three major categories of oral steroid contraceptives: 1. Combination 2. Sequential (no longer recommended) 3. Daily progestogen.

The combination pill, which contains both a synthetic estrogen and a progestogen, is the most widely used and most effective. The composition of currently marketed oral contraceptives is listed in Table I. Each of the combination pills contains either Ethinyl Estradiol or Ethinyl-Estradiol-3-Methyl Ether (Mestranol). Ethinyl estradiol is about 1.7-2 times as potent as Mestranol; i.e., quantity and activity must be evaluated. Progestogens are used in oral contraceptives rather than progesterone because progesterone is relatively inactive when orally ingested.

THE SEQUENTIAL type pills, which the FDA requested withdrawn from the market in February, 1976, consisted of a regimen of estrogen alone for about two weeks folowed by a week of combined therapy, i.e., estrogen and progesterone. The sequential pills were not as effective a contraceptive as the combination pill. The sequential pills were withdrawn because new studies strongly suggest that there may be an increased risk of endometrial carcinoma among users, as opposed to women taking the combination type oral contraceptives.

The third category is the mini-pill or microdose daily progestogen. This type contains no estrogen. However, it must be kept in mind that progestogens are metabolicaly converted to estrogens at rates as high as 5-10%.

Table II shows the relative estrogen dominance of various preparations. Clinically, how can this information be used in selecting the appropriate oral contraceptive for a patient? Women differ in the amounts of natural steroids which they synthesize and tolerate without side effects. Most women do well on any of the products in the middle range of the

*Assistant Professor, Department of Obstetrics-Gynecology, University of South Alabama College of Medicine, Mobile.

TABLE 1
COMPOSITION OF ORAL CONTRACEPTIVES

	Estrogen (mcg.)		Progestogen (mg.)	
Drug	Ethinyl Estradiol	Mestranol	Norethindrone	Norethindrone acetate
Ortho-Novum 1/50		50	1.0	
Ortho-Novum 1/80		80	1.0	
Ortho-Novum 2 mg.		100	2.0	
Ortho-Novum 10 mg.		60	10.0	
Ortho-Novum SQ *		80	2.0	
Norinyl 1+50		50	1.0	
Norinyl 1+80		80	1.0	
Norinyl 2 mg.		100	2.0	
Norquen *		80	2.0	
Modicon	35		0.5	
Brevicon	35		0.5	
Micronor			0.35	
Nor-Q.D.			0.35	
Norlestrin 1 mg.	50			1.0
Norlestrin 2.5 mg.	50			2.5
Loestrin 1/20	20			1.0
Loestrin 1.5/30	30			1.5
Zorane 1/20	20			1.0
Zorane 1/50	50			1.0
Zorane 1.5/30	30			1.5

	Estrogen (mcg.)	Progestogen (mg.)				
Drug	Ethinyl Estradiol	Ethynodiol Diacetate	Mestranol	Norethynodrel	Norgestrel	Dimethisterone
Ovulen		1	100			
Demulen	50	1				
Enovid-E			100	2.5		
Enovid-5 mg.			75	5.0		
Ovral	50				0.5	
Lo/Ovral	30				0.3	
Ovrette					0.075	
Oracon *	100					25

*No longer recommended by FDA.

TABLE II
Hypothetical Spectrum of Current Oral Contraceptive (August 1973) Listed by Relative Estrogen Dominance+ (Commercial names used)

	Most estrogen dominant								Progestogen only
COMBINED	ENOVID-E	ENOVID 10	ENOVID 5*	OVULEN	NORINYL 2 mg*	ORTHO-NOV. 2 mg*	DEMULEN	NORINYL 1/80	ORTHO-NOV. 1/80	NORLESTRIN 1 mg	NORINYL 1 mg	ORTHO-NOV. 1 mg	OVRAL*	NORLESTRIN 2.5 mg*	ORTHO-NOV. 10 mg.	LOESTRIN

+ Spectrum position only author's estimate influenced by dosage proportion and the relative estrogenic, anti-estrogenic, and adrogenic activity of progestogen used (5,6).
*Optimum oral contraceptive dose as tested for breakthrough bleeding (4, 5, 6)

spectrum (Table II). The FDA has recommended no more than a 50 microgram dosage of estrogen. Initially, I select a pill from the middle of Table II.

In the less feminine woman who obviously has acne, hirsutism, small breasts, or oily skin, my first choice is an estrogen dominant pill. If a patient has an ectopic cervix, mucorrhea, complains of moist ovulation phase in normal menstrual cycles, fibrocystic disease, tender breasts, excessive cyclic edema and fluid retention or chronic heavy menstrual flow (signs and symptoms of estrogen excess), she should be given a less estrogen dominant product as first choice.

THE SEQUENTIAL pills should be discarded because of the possible increased risk of endometrial carcinoma. Patients who were taking the sequential type should be changed to another type pill or to another method of contraception. In the past, my only indication for the sequential type pill was the patient who had oligomenorrhea or amenorrhea prior to beginning the pills. In fact, these patients should never be given the combination pil because of pituitary suppression with resultant post-pil amenorrhea and infertility problems.

With the sequentials unavailable, it is recommended by some that patients with amenorrhea or oligomenorrhea be given a combined oral steroid contraceptive with no more than 30 micrograms of estrogen. My personal preference for these young girls in the childbearing years is a mechanical method of contraception.

I rarely use the mini-pill or microdose-progestogen only-because it is not strongly effective as a contraceptive (missing only one pill may lead to pregnancy) and breakthrough bleeding is frequently a nuisance.

It is often necessary to tailor the pill to the patient's side effect response in a trial-and-error fashion. Table III gives you symptoms of estrogen excess, Table IV symptoms of estrogen and progestogen deficiency, and Table V symptoms of progestogen excess.

Patients taking oral contraceptives should be seen and

TABLE III
SYMPTOMS OF ESTROGEN EXCESS

HYPERTENSION
VASCULAR HEADACHE
HYPERPIGMENTATION
HYPERMENORRHEA
DYSMENORRHEA
NAUSEA AND VOMITING
CERVICAL ECTROPION
CYCLIC WEIGHT GAIN
BLOATING
MOODINESS
INCREASED FEMALE FAT DISTRIBUTION
TELANGIECTASIA

TABLE IV
SYMPTOMS OF ESTROGEN AND PROGESTOGEN DEFICIENCY

ESTROGEN DEFICIENCY
Spotting Early in the Cycle
Vasomotor Symptom
Atrophic Vaginitis - Dyspareunia
Hypomenorrhea

PROGESTOGEN DEFICIENCY
Spotting Late in the Cycle
Weight Loss

TABLE V
SYMPTOMS OF PROGESTOGEN EXCESS

INCREASED APPETITE
WEIGHT GAIN
DEPRESSION
CHANGED LIBIDO

examined every six months. Studies suggest that symptoms of estrogen and progestogen deficiency or excess can be identified and that by selecting a more apropriate pill, most can be alleviated.

WHEN ONE thinks of "the pills" and their side effects, a fear of thromboembolic phenomena is the primary concern. We are all aware of reported deaths, cerebrovascular accidents, pneumonectomies, and similar catastrophic events which have been attributed to "the pill." Recently, attention has been directed to an increased incidence of primary hepatic tumors in women of childbearing age who had been ingesting oral steroids.

There is another less publicized and less catastrophic result of oral contraceptives which concerns me greatly and which you as practicing physicians see and may not attribute to the pill. This problem is a very insidious depression or irritability which occurs in the pill patients very frequently and changes the quality of their life. This may occur soon after the patient starts the pills or may be a latent effect after she has taken the pills with no apparent

adverse effects for several years. Unfortunately, neither the patient nor her physician attributes her depression or the loss of her joie de vivre to the pill. The diagnosis is easily made by stopping the pill for a cycle. This is rarely a life-threatening side effect, but one of which I urge you to be aware.

Increasing the estrogen dominance in the pill may decrease the depression; but the OC should be eliminated completely and another method of contraception advised during the interval before another pill is prescribed. It has been reported that supplemental Vitamin B_6 (pyridoxine) alleviates depression in patients taking oral contraceptives. In my experience, the use of pyridoxine has been disappointing [4]

Tables VI and VII give the relative and absolute contraindications to the use of oral contraceptives. The oral contraceptive pill is certainly not ideal for every patient. The next most effective method is the intrauterine device, the use of which is now acceptable in the nulligravida.

As you can see, there are many factors which I consider when I decide "which pill for my patient?" Also, the "pill" is not a suitable method of contraception for every patient. I hope that the tables provided will be as useful to you, as they have been to me, in guiding oral contraceptive therapy.

TABLE VI
RELATIVE CONTRAINDICATIONS

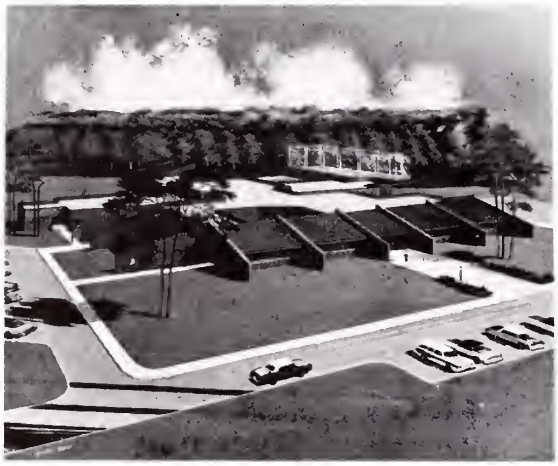
Epilepsy
Oligomenorrhea
Amenorrhea
Uterine Fibroids
Early Diabetes Mellitus
Hypertension
Venous Varicosities and Venous Insufficiency

TABLE VII
ABSOLUTE CONTRAINDICATIONS

CA of BREAST
CA of UTERUS
PREGNANCY
ACTIVE LIVER DISEASE
HYPERLIPEDEMIA
AGE 40 or OLDER
HISTORY OF PREVIOUS
THROMBOEMBOLIC EPISODE

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A Study Of Diagnoses Made In A Rural Community Hospital Emergency Room

Marc A. Armstrong, M.D.*

"A retrospective review of 1,286 diagnoses made on 1,171 patients seen in the emergency room of a rural community hospital was made to ascertain the types of disease processes with which a rural Family Practitioner should be familiar. A conclusion is suggested. This information may be of some value to recent graduates of Family Practice Residencies and their teachers."

Marc A. Armstrong, M.D.

A RETROSPECTIVE review of the diagnoses listed on the Emergency Room forms at Bibb County Hospital from 1 January through 31 December, 1975 was made to determine what types of pathology a physician might encounter in rural practice. This information may be of some value to family practice residencies attempting to determine the skills they should teach residents who are planning to enter rural Family Practice.

Bibb County Hospital is a 25-bed Hill-Burton hospital located in the County Seat of Centreville (population 4,300)[1] and serves a rural Appalachian county of 14,000[1]. It is 30 miles from a 500-bed hospital in Tuscaloosa, which is a referral hospital for a seven county West Alabama area, and has full time emergency physicians, as well as a full complement of traditional specialists. Bibb County Hospital is staffed by two physicians: a surgeon and a family practitioner, neither of whom practices obstetrics.

Twenty eight per cent of Bibb County's residents are black, and 72% are white.[2] The blacks have completed an average of 6.1 years of school, and the white 8.6 years.[2] The median income of a black family is $3,240, as compared with $6,453 for a white family.[2]

An analysis of the emergency room visits from 1 January through 31 December, 1975, revealed a total of 1,171 visits (Table I). Sixty and one-half per cent of the patients were male, and 39.5% were female.

THE 1,286 diagnoses (Table II) were divided, rather arbitrarily, for illustrative purposes into eleven categories: Surgery (41% of the diagnoses), Gastrointestinal Diseases (11.4%), Pediatrics (10.3%), Orthopaedics (10.7%), Medicine (8.3%), Genitourinary Diseases (3.4%), Neurology/Neurosurgery (3.3%), Psychiatry (4.7%), Ear Nose & Throat (2.6%), Opthamology (2.3%), and Dermatology (2.0%). It can be argued that some diagnoses would be better placed in other categories, and the reader is encouraged to rearrange them as he wishes. Table II lists the number of diagnoses in each category.

Clinical Assistant Professor of Family Practice, College of Community Health Sciences, University, Alabama.

TABLE I
BCH EMERGENCY ROOM VISITS
1 JAN. - 31 DEC. '75

AGE YEARS	MALE	FEMALE	TOTAL	%
0-9	130	102	232	19.8%
10-19	169	58	227	19.4%
20-29	107	54	161	13.7%
30-39	69	44	113	9.6%
40-49	56	44	100	8.6%
50-59	85	57	142	12.2%
60-69	42	42	84	7.2%
70-79	22	32	54	4.6%
80-89	22	23	45	3.8%
90-99	5	6	11	0.9%
100+	2	0	2	0.2%
	709 (60.5%)	462 (39.5%)	1171	100.0%

Not surprisingly, since Bibb County is a farming, strip mining, and lumber area, lacerations (236) and contusions & abrasions (169) were the most common diagnoses. About 1/3 of the lacerations required primary plastic repair and about 2% required tenorrhaphy. The third most common diagnosis was gastroenteritis (110). The types of disease ran from the common (Otitis Media) to the uncommon (femoral artery occlusion). Life threatening problems in-

SEE TABLE II ON FOLLOWING PAGE

cluded myocardial infarction, asphyxiation from aspiration of chewing tobacco, ruptured ectopic pregnancy, bullet wounds of the head, skull and cervical spine fractures, ruptured Berry anerysm, and a variety of other insults to life and limb.

The data suggest that a physician practicing in a rural area should be familiar with the reduction of simple fractures, primary plastic closure of lacerations, early care and stabilization of the severely injured or ill patient, as well as familiarity in depth of those medical and surgical problems that he intends to hospitalize and treat rather than refer.

A separate study[3] revealed that about four per cent of the patients seen in the Bibb County emergency room were referred elsewhere by the attending physician.

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TABLE II

DIAGNOSES (Number = 1286)

DIFFERENT DIAGNOSES (NUMBER = 174)

DERMATOLOGY (2.0% Diagnoses) N = 26

Insect Bites	11
Giant Urticaria	4
Contact Dermatitis	4
Atopic Dermatitis	2
Scarlatina Rash	2
Neurodermatitis	1
Leukoplakia	1
Lichenification antecubital fossa	1

ENT (2.6%) N = 34

Sinusitis	6
Rhinitis	4
Labyrinthitis	4
Foreign Body in Ear Canal	4
Parotitis	3
Temporomandibular Joint Dislocation	2
Foreign Body in Mid-eosphagus	2
Epistaxis	2
Laryngitis	2
Asphyxiation from Aspiration of Chewing Tobacco	1
Foreign Body Nose	1
Epiglottal Abrasion	1
Dental Abscess	1
Poor Fitting Dentures	1

GENITOURINARY (3.4%) N = 44

Urinary Tract Infection	18
Ureteral Calculus	11
Acute Urinary Retention	5
Pyelonephritis	3
Prostatitis	1
Endometriosis	1
Ruptured Ectopic Pregnancy	1
Ruptured Ectopic Pregnancy versus Ovarian Torsion	1
Dysfunctional Uterine Bleeding	1
Menorrhagia	1
Vaginitis	1

GASTROINTESTINAL (11.4%) N = 147

Gastroenteritis	110
Peptic Ulcer Disease	6
Irritable Bowel Syndrome	5
Fecal Impaction	5
Splenic Flexure Syndrome	4
Diverticulitis	3
Obstipation	3
Duodenitis	2
Gastritis	2
Hiatus Hernia	2
Ulcerative Colitis	1
Bleeding Internal Hemorrhoids	1
Prolapsed Internal Hemorrhoids	1
Thrombosed External Hemorrhoids	1
Foreign Body in the Anus	1

MEDICINE (8.3%) N = 107

Myocardial Infarction	13
Hypertension	13
Viral URI	13
COPD	13
Pneumonia	8
Influenza	8
Bronchitis	7
Pulmonary Edema	5
Hypoglycemia	4
Superficial Thrombophlebitis	3
Anaphylaxis	2
Dry Air Syndrome	2
Supraventricular Tachycardia	2
Polymyalgia Rheumatica	1
Adrenocortical Insufficiency	1
Orthostatic Hypotension	1
Occasional PVCs	1
Rheumatoid Arthritis	1
Infectious Mononucleosis	1
Atrial Fibrillation	1
Sinus Bradycardia	1
Chronic Lymphocytic Leukemia	1
Profound Anemia	1
Siariasis	1
Diabetes Mellitus	1
Fever of Unknown Origen	1
Aspiration Pneumonia	1

NEUROLOGY/NEUROSURGERY (3.3%) N = 42

Grand Mal Seizure	7
Stroke Sundrome	7
Transient Ischemic Attack	6
Vascular Headache	5
Concussion Syndrome	4
Encephalitis	2
Syncope	2
Tension Headache	2
Bullet Wound to Head	2
Ruptured Berry Aneurysm	1
Skull Fracture	1
Cervical Spine Fracture	1
Chronic Organic Brain Syndrome	1
Vertebral-Basilar Artery Insufficiency	1

OPTHAMOLOGY (2.3%) N = 29

Foreign Body &/or Corneal Abrasion	13
Conjunctivitis	12
Corneal Ulcer	1
Corneal Laceration	1
Corneal Burn	1
Blepharospasm	1

ORTHOPAEDICS (10.7%) N = 137

Fracture (unspecified by data collector)	17
Fracture Phalanyx Hand	10
Fracture Humerus	9
Fracture Radius &/or Ulna	9
Fracture Clavicle	6
Fracture Femur	5
Fracture Tibia &/or Fibula	3
Fracture Carpal Navicular	2
Fracture Nasal Bones	2
Fracture Toe(s)	2
Fracture Rib(s)	2
Dislocated Shoulder	3
Dislocated Hip	1
Dislocated Finger	1
Lubosacral Strain	15
Cervical Strain	2
Sprained Ankle	19
Sprained Wrist	11
Sprained Knee	4
Sprained Thumb	1
Knee Effusion	3
Tennis Elbow	1
Bursitis Hip	1
Supraspinatus Tenitis	1
Tietze's Syndrome	5
Osteoarthritis	2

PEDIATRICS (10.3%) N = 133

Otitis Media	55
Pharyngitis	34
Drug Ingestion	15
Bronchiolitis	13
Status Asthmatious	5
Croup	4
Swollowed Foreign Body	2
Otitis Externa	1
Intestinal Parasities	1
Roseola	1
Oral Moniliasis	1
Bean in the Umbilicus	1

PSYCHIATRY (4.7%) N = 61

Acute Anxiety	42
Hyperventilation	5
Acute Ethanolism	4
Depression	3
Grief Syndrome	3
Drug Overdose	1
Drug Withdrawal	1
Stocking Glove Paresthesia	1
Hysteria	1

SURGERY (41%) N = 526

Lacerations	236
Puncture Wounds	16
Gun Shot Wounds	4
Stab Wounds	4
Foreign Body	12
Avulsions	5
Incomplete/Complete Amputation Toe or Finger	5
Incomplete Amputation of the Ear	1
Fish Hook Removal	6
Contusuions & Abrasions	169
Animal Bite	8
Snake Bite	1
Human Bite	1
Pneumothorax	2
Burns	20
Peripheral Vascular Disease	3
Acute Femoral Artery Occlusion	1
Cellulitis	11
Crush Injury of the Hand	2
Possible Avulsion of Bronchus	1
Metastatic Carcinoma	1
Carcinoma of the Colon	1
Acute Cholecytitis	1
Cholelitiasis	1
Appendicitis	2
Groin Abscess	1
Perirectal Abscess	1
Mechanical Small Bowel Obstruction	2
Incarcerated Inguinal Hernia	2
Ingulnal Hernia	3
Incarcerated Spigelian Hernia	1
Bleeding Peptic Ulcer	2

The author would like to thank Mrs. Elizabeth Garner who collected the data, and Dean James A. Pittman, Jr., who suggested that this information might be worthy of publication. ■



"Go home and get some rest. You can't do any good here."

For the month of May, 1976

"Physicians for the Day"

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Opelika, Alabama

Robert H. Story, M.D.
Tuskegee, Alabama

George C. Smith, M.D.
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Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

PMA
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D. C. 20005



Comments on Alabama's Medicaid Program

By RONALD E. HENDERSON, M.D.*

I THINK it is time that we look thoughtfully and thoroughly at the many problems facing the Medicaid Program in Alabama. The information made available to the State Committee of Public Health last month and included in the Alabama Medicaid AFY-75 booklet furnished by the Medical Services Administration shows that when AFY-75 is compared to AFY-74, the growth of the program has been phenomenal and perplexing.

In view of the difficulty experienced in getting state funds for Medicaid for this fiscal year, it is obvious to me that there are two immediate problems. The first problem is that enough money has been appropriated to continue the program at an acceptable level for the remainder of this fiscal year. The second, and more important problem, is that the program is administered in such a manner that there should be little difficulty in convincing the legislature that funds asked for in the future are justified.

Everyone is aware of the fact that we are in an inflationary period and this contributes to part of the increase in cost; but there are problems that can be and, indeed, need to be corrected. In my best judgement, there is overutilization by both some providers and some recipients. When FY-74 is compared with FY-75, eligibles rose only 6%; recipients rose 7%, but visits to the doctor's office rose 46%. Of the people receiving medicaid cards in 1975, 79% of them used these cards to obtain medical care. I do not know what per cent of the general population seek medical attention each year, but I doubt if it approaches this figure.

IN 1975, 43% of the medicaid budget for Alabama went for nursing home care. For this, Alabama citizen should be fortunate, I guess, because nationwide this figure was close to 50%. Twice as much money was spent for skilled nursing care as for intermediate nursing care. It is my premonition that it is not the necessity for the skilled nursing care that allows this differential, but that it is due mainly to the fact that the intermediate nursing care is an optional or non-mandatory part of Medicaid and, therefore, potentially vulnerable to being discontinued.

It is also of interest to me that of the 13,000 patients in nursing homes in the State of Alabama only 1300 (10%) have no relative or no potential place to go should the nursing home not be available. This to me represents one of the symptoms of the dissolution of the family unit as seen in our society today. I will have further comments pertinent to this in just a minute.

The State Board of Health through the Medical Services Administration has already begun to reduce the scope of the program as outlined in the conclusion on page 57 of the Alabama Medicaid AFY-75 Booklet.

1. The basic days of hospitalization allowed per year were reduced from 30 to 20.
2. Hospital extensions for adults were limited to 10 days.
3. Psychiatric hospital care for persons under 2.4 has been discontinued.
4. Co-payment of $.50 is required by a recipient for each prescription obtained under the drug program.
5. Medicaid has asked Medicare to pay part of the first 100 days of care in nursing facilities.
6. The amount of personal income retained by a nursing facility patient was reduced from $45 per month to $25.
7. MSA discontinued payment for reserved nursing facility beds while patients were transferred to hospital care.
8. The ceiling on the per diem rate for intermediate care beds was reduced from $20.50 per day to $19.35.
9. The MSA audit staff has been increased to provide an in-depth audit of nursing home cost reports.
10. Physician visits for chronic illnesses which have stabilized were reduced from two per month to one per month.
11. MSA will no longer pay for telephone consultations with physicians.
12. An upper limit has been established for Home Health Care at $25 per visit.
13. A ceiling of $21.50 per day on skilled nursing home care has been established.

I would like to comment on No. 4, the co-payment of drugs. This is one of the few economy moves taken on which we have data available. An update study on co-pay for drugs in the Alabama Medicaid Program done by Linda B. Jenkins, research analyst, dated February 20, 1976, was recently made available. In this study, she points out that co-pay is a cost sharing mechanism which is a familiar part of many health insurance policies. It requires the patient to pay a small part of each medical bill and Medicare has followed the lead of the insurance companies and makes broad use of the co-pay principle.

She points out that Federal rules prohibit co-pay entirely for all health insurance services that states are required to furnish as part of medicaid. Co-payment is permissable only in connection with the so called non-mandatory health services and our two major non-mandatory health services are drugs and intermediate nursing care.

IN JUNE, 1975, the co-pay principle was applied to all drugs except birth control pills which are exempt as part of

the mandatory family planning service. The Alabama co-payment program for drugs has been in effect for 7 months and several facts have been brought out. The number of claims declined by 6,247 from August to January which would contradict seasonal anticipations because January is traditionally a "high illness" period of the year.

In January, 1975, there was an increase of 77,000 eligibles but a simultaneous decrease of 1000 recipients. Co-pay seems to be the only variable which could satisfactorily explain this fact.

Claims per recipient decreased and the sum and substance of this is noted when March, 1975, in which drugs cost the Medicaid Program $1,599,543, is compared to ten months later in January when the the monthly cost fell to $1,345,600, a savings of $200,000 a month. It is predicted that co-payment, even in the face of inflation and increased number of eligibles, should save the Medicaid Program between $200,000 and $400,000 per month or between 2.4 and 4.8 million dollars per year. Ms. Jenkins points out that savings of this magnitude show that co-pay is an administrative policy which best serves the taxpayer.

GEORGIA has a more far reaching co-payment program in effect that is in essence a pilot study for the Medicaid Program for the rest of the country. Last year, HEW was requested by the State Committee of Public Health to allow a co-payment so that the recipient would pay 50% of the cost of the first day of hospitalization and $1 per visit co-pay for all physicians visits. A letter from Virginia Smith, the regional commissioner for HEW, was received stating that sister states would not be allowed to have similar pilot studies and, therefore, the request was denied.

After making the above observations, I feel that several suggestions are in order. *I would like to see the Medical Services Administration address itself to provider and recipient abuse.* The total administrative expense for the Medical Services Administration for FY-75 was 6.5 million or 4.06% of the net expenditure. This includes 1.98% fiscal agent fees. This indeed may be false economy.

I would like to see the top providers in each category examined in detail for abuse and overutilization of the program. I would like to see the peer review mechanism of the Medical Association of the State of Alabama better utilized. I would also like to see the Medical Services Administration develop a system such as used by other states to identify recipient abuse. I think administrative dollars spent in this way reap great savings.

The progessional relations staff at Blue Cross-Blue Shield can be doubled or tripled in an attempt to get broader involvement of the physicians of the State of Alabama into the Medicaid Program. For the present time, at least one must live with the profile system that determines the fee paid a physician. This seems counter productive to getting sincere physicians interested in the Medicaid Program. A physician is paid 100% of his bill up to the 75th percentile or his usual and customary fee, whichever is lower. The young physician, however, just going into practice in the state is unnecessarily penalized because he is paid only at the 50th percentile until he can develop his own profile which takes 12 to 18 months.

THIS IS AN obvious inequity and has caused many young physicians desperately needed to deliver care to the medicaid patients to wash their hands of the program. *Seminars need to be held throughout the state for the physician and/or office personnel so that they better understand Medicaid and Medicare.* This has been done on a limited scale, but in my opinion these efforts should be intensified and enlarged.

I would like to ask the Medical Services Administration to request again the initiation of a co-pay program similar to what has already been requested of HEW, but to use the data gained from co-payment in the drug program. This specifically would be that the recipient would pay 50% of the first hospital day for each hospital admission and $1 for each office visit or emergency visit to see the physician.

The above suggestions are feasible and possible. I would also like to see further innovative ideas come from the State Committee of Public Health. The Medicaid Program is in trouble not only in Alabama but throughout the nation. Changes will be made in the Medicaid law and I think opinions and ideas should be formulated now and relayed to HEW and to Alabama's Congressional delegation. As I mentioned a minute ago, the nursing home care absorbed 43% of the medicaid budget for FY-75. This figure is closer to 50% nationwide. *I think that this part of the program should be segregated and placed under some other agency by some other name.* It could be called social care or socialcaid. This separation would make it easier for the public and legislators to see where the money is being spent.

I also think that an effort should be made to get old people out of nursing homes into homes. One thing that the Department of Pensions and Securities has done very effectively and economically is to have children placed with foster parents. These people are re-imbursed on a reasonable basis but much cheaper than it would cost to institutionalize these children. I would like to see a large number of our elderly people placed with their relatives or with foster guardians if there are no relatives. The cost for such an arrangement should be shared by the family on their ability to pay.

Along these same lines, I think we need to look into the possibility of having in the State of Alabama a relative responsibility law. The availability of Federal and State monies for nursing home care has allowed people to shirk their responsibility for their elderly. When our grandparent's grandparents grew older, they were kept in the home, their ideas were respected, and they were the cement for the family unit. This is the way it is in all societies where longevity prevails. In the area of Russia where people are reported to live to be 140 to 150 years of age, the elderly are much respected and always kept within the home. I think this is something we should promote in our society and such a relative responsibility law or boarding arrangement for re-imbursement would promote this.

I further think the state needs a law that will establish

COMMENTS ON ALABAMA'S MEDICAID PROGRAM

the minimum amount of time that a person can disburse all of their assets before they become eligible for medicaid. There are cases where families and/or nursing home proprietors have promoted the disbursements of assets among their family so that the recipient will immediately become available for Medicaid. I think this is to be frowned upon and should certainly save the State and Federal governments considerable sums of money.

IN SUMMARY, I would like to emphasize again the difficulty Medicaid is in throughout the United States. Some states are in more trouble than others, but I would like to see Alabama become a leader in offering innovative ideas and to have a program administered in such a fashion that it serves the best interest of the Medicaid recipient as well as the taxpayer. It seems appropriate that the Medical Services Administration prepare a white or position paper on Medicaid. This along with the points that I have mentioned, as well as others, could be studied so that a solid plan of action could be initiated.

The opinions expressed here reflect those of the author. They do not necessarily reflect those of the editorial review board of this Journal.

***Obstetrics-Gynecology, Birmingham, Alabama. Member of the State Board of Censors.** ■

CONTINUED FROM PAGE 35

SURGICALLY TREATABLE ASTHMA

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DEAN'S REPORT:



Estimating the Need for Physicians in Alabama

G. GAYLE STEPHENS, M.D., DEAN, SCHOOL OF PRIMARY MEDICAL CARE, HUNTSVILLE

FUTURE observers may identify the five years 1971-76 as the beginning of a new era in medical education in Alabama — an era which did not repudiate the past but which used its strengths to respond to the needs of the State for more physicians, especially more family physicians.

Such future observers may question the wisdom of the State doubling the size of the freshman medical school class at UAB, beginning a new four year medical school in Mobile, establishing clinical branches in Huntsville and Tuscaloosa and initiating a state-wide effort for family practice residencies all in a half decade, but they surely cannot fail to discern the unprecedented nature of such a commitment.

It is not at all clear at this writing that such a massive effort will succeed in providing all Alabamians with access to appropriate medical care but it is clear that the effort is heroic.

THERE ARE MANY unanswered questions. Can quality medical education programs be conducted in small cities or large towns? Can physicians in private practice make a sustained contribution to teaching? Is family practice a proper clinical discipline? Can students and residents consistently be selected or motivated to practice in areas of special need?

But perhaps the most important question appears on the surface to be the simplest. It is the deceptive question of numbers: "How many doctors does Alabama need?" Until one thinks about this question deeply, the answer seems easy or the question seems absurd. Either everybody knows the answer or it is impossible for anybody to know.

The reason this question is so hard to answer is that the answer reflects a number of prior assumptions which are rarely stated and almost never examined. These assumptions go to the very roots of our strongest beliefs about who needs medical care for what reasons and who should provide it.

If one believes that most people go to the doctor for inappropriate reasons, or that all people who really need it are getting proper medical care now, or that one can build the medical care system around hospitals, or that indigent persons exploit whatever services they have access to, or for that matter that doctors abuse the system, such beliefs influence profoundly what one feels about the proper number and distribution of doctors in Alabama.

MORE THAN THESE assumptions, though, which affect our perception of the problem, there are technical assumptions which enter into one's estimation of its magnitude. Among those who have attempted to estimate the need for doctors in Alabama, it is clear that the technical assumptions are not shared, let alone the presumptions. There is less rational justification for this lack of methodological clarity than for our failure to agree on the larger issues of health care delivery.

One way of estimating the need for doctors is to use physician/population ratios. At the time of the Flexner Report in 1910, this ratio was about the same as now (about 1:800); and the eminent sage thought that was too many doctors. He suggested that one properly educated physician per 2,000 "souls" was enough.

At that time, all physicians were more or less generalists and medical care was not institutionalized to the extent it is now. The American Academy of Family Physicians has been using a ratio of 1:2500 as a goal for family physicians in the U.S., a 25% patient-load increase over Flexner, presumably due to increased efficiency of practice.

These ratios are meaningless by themselves. Unless we know the system in which the family physician is working, we don't know what his/her role is; hence we don't know how to estimate the work load per doctor. In Great Britain where the system is based on family doctors, the ratio is closer to 1:1400 and the overall physician/population ratio is less than 1:1000. This means that the ratio of family physicians to all other physicians is 4:1—almost the exact opposite of the U. S., where it is now 1:5.

It is more than a little ironic that there is no perceived doctor shortage in Britain while there is in the U. S., where there are actually more doctors proportionately. Evidently the division of labor among family physicians and consultants is an important variable in determining the need for doctors.

IN THE RECENTLY completed "Physician Manpower Study" performed by the Alabama Comprehensive Health Planning Administration, it is reported that Alabama now has 694 family physicians/general practitioners—a total that the study estimated to be 297 short. It is interesting that this study determined the need by asking a 10 per cent sample of Alabama physicians to estimate local needs and extrapolating from these replies.

By taking into account an estimated annual attrition of 112, through death or retirement, among all physicians, an out-migration from the State of 100 physicians per year and a 1 per cent annual population growth, the study projected the deficit of all physicians in Alabama by 1980 to be 1,919. This deficit is to be met by graduates from the State's medical education programs plus graduates from other states who move to Alabama.

While one may question the methodology of this study, particularly its estimates of specialty needs and distribution, the projections for increasing the number of family

physicians in the State seem to me to be pretty much on target and commensurate with reasonable possibilities for success if the goals can be accepted.

The study calls for 618 additional family physicians by 1980 and 939 by 1985. These numbers are to be met mainly by increasing the number of first year slots in family practice residencies in the State to 115.

Such a prodigious increase will have to come from new programs, since at this writing there are only four accredited family practice residencies in the State (Huntsville, Tuscaloosa, Anniston, Carraway Methodist Medical Center in Birmingham).

Within the University of Alabama System Medical Education Program (UASMEP), there is now a Family Practice Program Committee charged with coordinating the efforts of the System to establish new programs. This Committee reports to the Executive Dean, James A. Pittman, Jr., M.D. and is chaired by me.

Its members are F. Douglas Scutchfield, M.D., and William F. deShazo, M.D. (College of Community Health Sciences, Tuscaloosa), Herbert T. Smith, M.D. and Charles T. Moss, M.D. (School of Primary Medical Care, Huntsville), Robert G. Sherrill, Jr., M.D. (UAB), and Roger Lienke, M.D. (Anniston). In addition, the committee has had a number of guests and observers and maintains liaison with H. C. Mullins, M.D. (USA) and with The Alabama Academy of Family Physicians.

THE COMMITTEE is now working to establish new programs in Birmingham, Selma, Florence and Montgomery. Developmental monies were appropriated in fiscal 1976 for these sites in addition to Bay Minette, Troy and Heflin. It is clear that complete programs cannot be developed in all these locations but various integrated and cooperative plans are being considered. Completed applications for residences have been prepared by East End Memorial Hospital and Lloyd Noland Hospital in Birmingham.

The Committee does not consider itself charged with administrative responsibility for all these programs, but is a planning and coordinating group. Residencies may be owned and operated by hospitals, medical schools, educational foundations, and other institutions and they may be related to each other in a variety of agreements and affiliations.

What is clear is that the production of family physicians will require a massive cooperative effort by physicians and hospitals in a number of locations throughout the State. Not only family physicians but other specialists will have to commit themselves to teach and hospitals will have to create a proper educational climate for residents.

Funding for these programs will have to come from multiple sources, federal, state and local. In the long run, I think that funding will be less a problem than human resources in leadership, faculty and administration.

ALABAMA is making its own style of "great leap forward" in medical education. It will require the best that any of us have to see that we do not fail to grasp the opportunities that are ours. If Alabama needs any family physicians, it needs enough to make a difference.

I'm not sure that anyone knows how many "enough" is, but the Comprehensive Health Planning Administration has spent a great deal of time and effort in studying the problem and has established a rational goal. I hope that these goals for family physicians can be accepted and reached. ■

Erratum

"The second paragraph of section 7 of the article by Dr. James A. Pittman, Jr. entitled 'Quality of Medical Education and Quality Health Care' in the November, 1975, issue of the Journal (Vol. 45, p. 65) was inadvertantly omitted. Printed below is section 7 of that article in its correct form."

7. **Pathology central.** Many other members of "the health care team" are spending large amounts of time, effort, and money studying specific organs or disciplines. One study recently claimed that pharmacy students in the U.S. now receive *twice* as many curriculum hours in *pharmacology* (not pharmacy) as do medical students, thus leading to the claim that they are the most expert at drug therapy and should "take over this aspect of management."

A major dividing line between physicians and non-physicians is knowledge of pathology, in its broadest sense. Just as Sherlock Holmes had an intimate and detailed knowledge of crime – specific crimes, specific sorts of crimes, individual and types of criminals and their habits, modes of operation, etc.–so must the physician be intimately familiar with the details of the individual diseases that attack man, in all their aspects, mechanisms, manifestations, and variations, so that he can quickly and accurately recognize, understand, cure, and prevent them. The assertion that we should teach "health" rather than "disease" is specious. Knowledge of the two is inseparable, and understanding of either is incomplete without understanding the other. They are two sides of the same coin. ■

Continuing Medical Education BY LARRY DIXON

DIRECTIONS: Each of the questions or incomplete statements below is followed by four or five suggested answers or completions. Select the one that is best in each case and circle.

1. A 52-year old man was previously treated for pulmonary tuberculosis. One month ago he began to lose weight and feel weak. Two weeks ago he began experiencing hemoptysis and became increasingly lethargic. He was admitted to the hospital and the following laboratory studies were obtained:

Serum creatinine	0.7 mg/100 ml
Serum sodium	105 mEq/l
Serum osmolality	210 mOsm
Urine sodium	45 mEq/l
Urine osmolality	250 mOsm

With respect to this clinical picture, which of the following statement applies?

   A. Saline infusion and administration of hydrocortisone would constitute appropriate management
   B. Water restriction and administration of hypertonic saline solution would contribute appropriate management
   C. Administration of 9-x-fluorohydrocortisone would constitute appropriate management
   D. The value for urine osmolality is in error
   E. Infusion of hypertonic mannitol would constitute appropriate management

2. A patient is found to have the following blood chemistries:

Serum electrolytes:

Sodium	135 mEq/l
Potassium	2.3 mEq/l
Chloride	116 mEq/l
Total CO_2 content	9 mEq/l
Blood pH	7.14

The most likely diagnosis is

   A. Chronic glomerulonephritis
   B. Renal tubular acidosis
   C. Diabetic ketoacidosis
   D. Lactic acidosis
   E. None of the above

3. A 41-year-old woman known to have chronic pyelonephritis and chronic renal insufficiency developed hypertension (blood pressure 160/120 mm Hg). She was given methyldopa, 250 mg three times/day and a diet containing no more than 20 mEq of sodium/day. Two weeks later, she was admitted to the hospital complaining of weakness, lethargy, nausea and vomiting. She had lost 15 lb., and her blood pressure had decreased to 130/80 mm Hg. Azotemia and acidosis had increased. With respect to this clinical picture, which of the following statements applies?

   A. The patient is in the terminal phase or uremia
   B. The lowering of the blood pressure had led to the progression of renal insufficiency
   C. The restriction of sodium intake has led to contraction of plasma volume
   D. The patient is allergic to methyldopa
   E. The sodium intake was not sufficiently restricted

4. A 32-year-old woman is being evaluated for severe symptomatic hypertension (blood pressure 220/150 mm Hg.) Arteriolar narrowing and papilledema are found on funduscopic examination. A continuous high-pitched bruit is heard in the epigastrium and left hypochondrium. Rapid-sequence excretory urography is normal except for ptosis of the right kidney. A radioisotope renogram shows bilateral delay in concentration and excretion of ^{131}I ortho-iodohippurate (^{131}I Hippuran).

Laboratory studies:

Hemoglobin	15.0 gm/100 ml
Serum Creatinine	1.0 mg/100/ml
Serum sodium	139 mEq/l
Serum potassium	3.7 mEq/l
Serum total CO_2 content	20 mEq/l
Urine	Normal

Which of the following should be undertaken at this time?

   A. Aldosterone secretion or excretion studies to exclude primary aldosteronism
   B. Medical management for hypertension for three to six months followed by re-evaluation
   C. Renal biopsy
   D. Renal arteriography and renal venous renin activity determinations
   E. Creatinine clearance determination

5. A 60-year-old woman has chronic pulmonary emphysema.

Laboratory studies:

Serum electrolytes:	
Sodium	140 mEq/l
Potassium	4.6 mEq/l
Chloride	92 mEq/l
Bicarbonate	42 mEq/l
Blood pH	7.46
pCO_2, arterial	62 mm Hg

These laboratory findings are compatible with

   A. Laboratory error
   B. Uncomplicated chronic respiratory acidosis
   C. Uncomplicated chronic metabolic alkalosis
   D. Chronic respiratory acidosis complicated by metabolic alkalosis
   E. Respiratory alkalosis complicated by metabolic acidosis

6. An abdominal paracentesis is performed on a patient with alcoholic cirrhosis, massive ascites and peripheral edema. Four liters of ascitic fluid are removed, but during the next 24 hr several liters more leak through the site of paracentesis. Forty-eight hours after the paracentesis, the patient is found to be oliguric (150 ml/24hr) and confused. His weight is 2 lb less than that recorded immediately prior to the time of paracentesis.

Laboratory studies:

Serum albumin	2.5 gm/100 ml
Serum sodium	122 mEq/l
	(value on admission: 136 mEq/l)
Blood urea nitrogen	40 mg/100 ml
	(value on admission: 15 mg/100 ml)

Urine sodium	1 mEq/l
Urine potassium	26 mEq/l

With respect to this clinical situation, which of the following statements is true?

A. Hyponatremia and oliguria could have been prevented by restricting water intake after paracentesis
B. Renal function may improve when abdominal pressure is relieved by removing more ascitic fluid
C. The deteriorating renal function is due most likely to occult gastrointestinal bleeding precipitated by the paracentesis
D. Oliguria may respond to infusion of plasma or hypertonic albumin
E. The management of choice is hypertonic mannitol infusion

7. An asymptomatic 49-year-old man was found to have moderately severe renal failure (Serum Creatinine, 4.2 mg/100 ml; blood urea nitrogen, 64 mg/100 ml) when admitted to the hospital for a hemorrhoidectomy. Physical examination disclossed no abnormalities. Blood pressure was 140/85 mm Hg.

Laboratory studies

Hematocrit	38 per cent
Hemoglobin	11.8 mg/100 ml
Serum electrolytes:	
Sodium	140 mEq/l
Potassium	5.3 mEq/l
Chloride	110 mEq/l
Total CO_2 content	18 mEq/l
Blood pH	7.33
Urine	Specific gravity 1.016; protein negative; 4-5 RBC/Hpf; 5-8 WBC/Hpf; no casts

In the first four days of hospitalization, renal function was stable and urine volume varied between 1250 and 1600 ml/day. Which of the following statements concerning the diagnosis is true?

A. Urinary tract obstruction is excluded because the patient is passing normal quantities of urine
B. The mild hyperchloremic acidosis is compatible with a diagnosis of urinary tract obstruction
C. The findings on urinalysis are incompatible with urinary tract obstruction
D. The lack of findings on physical examination virtually excludes a diagnosis of urinary tract obstruction
E. The lack of a history of flank or back pain, or of lower abdominal pain, virtually excludes a diagnosis of urinary tract obstruction

8. A 56-year-old woman was admitted to the hospital because of weakness, fatigue and bone pain. She had had proteinuria for the past 14 years and had noted nocturia for the past 12 months. On physical examination, her blood pressure was 150/100 mm Hg, pluse rate 105 min, and respiratory rate 17/min. She was pale, but did not seem to be acutely ill. Examination showed her head and neck to be normal. Left border cardiac dullness was 2 cm to the left of the left midclavicular line. The rest of the examination disclosed no abnormalities. Roentgenograms of the long bones showed multiple psudofractures.

Laboratory studies:

Hemoglobin	7 gm/100 ml
Hematocrit	21 per cent
Leukocyte count and differential	Normal
Serum creatinine	9 mg/100 ml
Calculated endogenous creatinine clearance	7 ml/min
Serum electrolytes:	
Sodium	139 mEq/l
Potassium	4.5 mEq/l
Bicarbonate	16 mEq/l
Chloride	100 mEq/l
Serum calcium	7.6 mg/100 ml
Serum inorganic phosphorus	5.5 mg/100 ml
Urine	Protein 3+; 3-4 WBC/Hpf; 0-3 RBC/Hpf; occasional hyaline casts

The patient was thought to have chronic glomerulonephritis with anemia causing her fatigue. She was discharge and placed on a 40-gm protein diet and a normal salt intake. In addition, she was given 3.6 gm of calcium carbonate and 40,000 units of vitamin D/day. Three weeks later she was seen in the emergency room because of nausea, vomiting and intense itching.

Laboratory studies:

Serum electrolytes:	
Sodium	138 mEq/l
Potassium	4.8 mEq/l
Bicarbonate	10 mEq/l
Chloride	102 mEq/l
Serum calcium	11.8 mg/100 ml
Serum inorganic phosphorus	11 mg/100 ml
Serum creatinine	12 mg/100 ml

The increase in calcium was probably caused by

A. A sudden decrease in glomerular filtration rate
B. A marked increase in parathyroid hormone level
C. Increased calcium absorption due to high calcium or vitamin D intake, or both
D. Magnesium deficiency
E. Hyperphosphatemia

9. A 38-year-old woman who had not been treated by a physician for five years developed severe headaches six weeks before admission to the hospital. Repeated determinations of her blood pressure consistently showed diastolic pressures between 120 and 130 mm Hg. **Differential renal function studies:**

	Left Kidney	Right Kidney
Urine flow, ml/min	0.15	3.79
Urine sodium, mEq/l	42	182
Urine osmolality, mOsm	629	403
Urine inulin, mg/ml	81	4.8
Urine PAH, mg/ml	27.5	1.7
Inulin clearance (C_{IN}) ml/min	30	80
PAH clearance (C_{PAH}), ml/min	100	350

This clinical picture would be most compatible with

A. Bilateral renal artery stenosis, more pronounced on the right
B. Bilateral renal artery stenosis with secondary parenchymal disease in the left kidney

C. Unilateral right renal artery disease with renal vascular hypertension
D. Values within the normal range of variation between the two kidneys of patients with primary hypertension
E. Unilateral atrophic renal parenchymal disease involving the left kidney

10. A 46-year-old man presents with a complaint of headaches. Funduscopic examination shows papilledema, hemorrhages and exudates. Blood pressure is 190/140 mm Hg. The patient had not been treated for hypertension in the past. There was no additional medical history pertinent to his illness.

Laboratory studies:

Hemoglobin	6.5 gy/100 ml
Platelet count	30,000/cu mm
Prothrombin time	26 sec (control: 12 sec)
Blood urea nitrogen	75 mg/100 ml
Serum sodium	120 mEq/l
Serum potassium	6.0 mEq/l
Serum creatinine	4.8 mg/100 ml
Urine	Protein 3+; 10-15 RBC/llpf; occasional hyaline, granular and white cell casts

Which of the following is the most likely cause of this syndrome?

A. Lead poisoning
B. Chronic glomerulonephritis with uremia
C. Malignant hypertension with associated microangiopathic hemolytic anemia
D. Coarctation of the descending thoracic aorta
E. Atheromatous emboli

ANSWERS

1. B	2. B	3. C	4. D
5. D	6. B	7. B	8. C
9. D	10. C		



"I found out your accident policy covered falling off the roof all right, but not hitting the ground."

CME CALENDAR

JUNE

● June 4-5, "Diabetes Mellitus" Conference, Joe Wheeler Lodge—Rogersville, Alabama. 10 Category I and prescribed credit hours.

● June 17-19, International Congress on Ocular Trauma, Eye Research Institute of Retina Foundation, Boston, Massachusetts. Information: H. MacKenzie Freeman, M.D., 20 Staniford Street, Boston, Massachusetts 02114.

● June 18-19 American Society of Internal Medicine, San Francisco, Ca. Contact: 535 Central Tower Bldg., 703 Market St., San Francisco 94103.

● June 21-23, American Society of Law and Medicine, Boston, Mass. Contact: Dr. Elliot L. Sagall, 454 Brookline Ave., Boston 02215.

● June 26, 1976, "AMA 18th National Conference on the Medical Aspects of Sports," Dallas Convention Center - Dallas, Texas. Sponsored by AMA Committee on the Medical Aspects of Sports.

● June 27-July 1, AMA Annual Meeting, Dallas, Texas.

JULY

● July 12-17, "Topics In Clinical Hematology and Oncology: Disorders of the Lympoid and Plasma Cells," ACP, Waterville, Maine.

● July 17-18, American Society of Oral Surgeons, Chicago, Illinois. Contact: 211 East Chicago Ave., STe 930, Chicago 60611.

AUGUST

● August 6-8, "Diabetes Mellitus" Conference, Olympia Spa, Dothan, Alabama. 10 Category I and prescribed credit hours. Contact: MASA's Education Department.

● August 28-29 "Pediatric Orthopedic Radiology," Monteleone Hotel, New Orleans. Contact: Ms. Wanda Patton, Institute for Pediatric Radiology, 4148 N. Cleveland Ave., Kansas City, Mo. 64117.

SEPTEMBER

● Sept. 4-5, AMA Regional CME Meeting, Jackson Hole, Wyoming.

● September 5-9, 1976, Estes Park Institute & the Southeastern Hospital Conference, "Regional Hospital Medical Staff Conference," Grove Park Inn - Great Smoky Mountains, Asheville, North Carolina, Category I credit available.

● Sept. 10-12, AMA Regional CME Meeting, Portsmouth, N.H.

● Sept. 11-12, AMA Regional CME Meeting, Milwaukee, Wisconsin.

● September 17-19 "Diabetes Mellitus" Conference, Lake Guntersville State Park, Guntersville, Alabama. 10 Category I and prescribed credit hours. Contact: MASA's Education Department.

● Sept. 20-22, Am. Cancer Society—National Cancer Institute, St. Louis, Mo. Contact: Dr. Sidney L. Arje, 777 Third Ave., New York 10017.

● Sept. 20-23, Am. Academy of Family Physicians Annual Meeting, Boston, Mass. Contact: 1740 W. 92nd St., Kansas City, Mo. 64114.

● Sept. 20-23, Am. Hospital Assoc. Annual Meeting, Dallas, Texas. Contact: 840 N. Lake Shore Dr., Chicago 60611.

● Sept. 29-Oct. 3, Southern Perinatal Assoc. Annual Meeting, Galatea Inn, Pensacola, Fla.

OCTOBER

● October 1-3 "Diabetes Mellitus" Conference, Gulf Shores State Park, Gulf Shores, Alabama. 10 Category I and prescribed credit hours. Contact: MASA's Education Department.

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DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival.
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INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections.
Efficacy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Trichuris	Ascaris	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	—	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	—
(range)	(70-99%)	(99.5-100%)	—	—

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.
PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults.
For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.
For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days.
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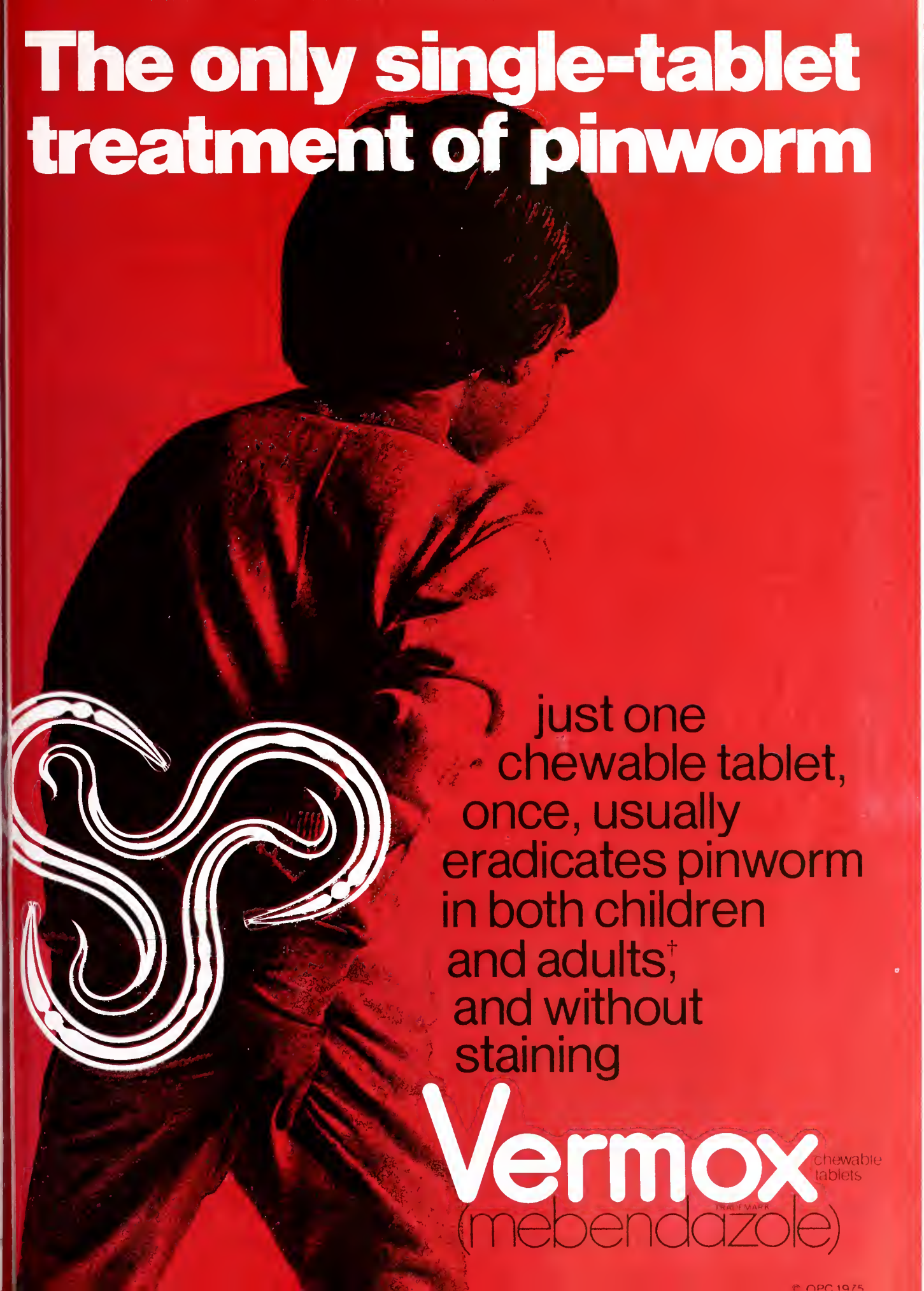
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Roster supplement

new members

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FAUCETTE, John Roberts, b 37, mc Ala. 74, recip. NBME 75, Carraway Methodist Hospital, 1615 25th Street, North, Birmingham 35234. ObG.

KNOX, G. Eric, b 43, mc Minn. 69, recip. Minn. 70, Department of OB-GYN, UAB Station, Birmingham 35294. ObG.

MARTIN, Lawrence Moorer, b 42, mc Miss. 69, recip. Miss. 69, 5 North University Hospital, UAB Station, Birmingham 35294. P.

McNALLY, Mario R., b 46, mc Universidad Autonoma De Nicaragua 70, recip. Ill. 74, 1808 7th Avenue, South, Birmingham 35294. P.

McCOY, Ronald Chester, b 44, mc Ala. 72, recip. NBME 73, 800 Memorial Drive, Bessemer 35020. OPH.

RODRIQUEZ-PACHECO, Hubert Alfredo, b 40, mc San Augustin 68, recip. Ill. 73, 800 Memorial Drive, Bessemer 35020. Pd.

SMITH, H. Thomas, Jr., b 48, mc Ala. 74, recip. NBME 75, Lloyd Noland Hospital, Fairfield 35064. Pd.

VINCENT, Arthur Hoyle, b 31, mc Howard 60, recip. Maryland 62, 1915 19th Street, Ensley, Birmingham 35218. FP.

WEINSIER, Roland Louis, b 42, mc Florida 68, recip. Fla. 69, UAB Station, Birmingham 35294. Nutrition.

LAMAR COUNTY

BOX, William Collier, b 36, mc Ala. 61, sb 62, Rt. 2, Sullignet 35586.

MOBILE COUNTY

MEADOWS, Donald Chapman, 36, mc Ala. 69, recip. NBME 70, 8107 Candlewood Dr. Mobile 36609.

SHARPE, Michael Roy, b 45, mc Ala. 72, recip. NBME 73, 409 McQueen Ave., Mobile 36609.

MONTGOMERY COUNTY

OLIVER, Frank Elery, b 45, mc Bowman Gray 71, recip. N.C. 71, 3540-F Carter Hill Road, Montgomery 36111. N.

MORGAN COUNTY

GANDHI, Dinesh Ramanlal, b 45, mc Gujarat India 70, recip. N.Y. 73, Doctor's Clinic, P. O. Box 930, Hartselle 35640. I.

TWENTE, George Edward, II, b 45, mc Miss. 71, recip. Miss. 71, 304 4th Ave., SE, Decatur 35601. P.

TALLADEGA COUNTY

KHAN, Khalid Latiff Punhoon, b 42, mc Punjab Pakistan 68, recip. Missouri 72, 204 Medical Office Park, Talladega 35150. OPH.

TUSCALOOSA COUNTY

TYLER, Louis Ira, b 20, mc Tulane 43, recip. La. 44, Partlow State School and Hospital, Tuscaloosa 35401. Pd.

reinstated

LAUDERDALE COUNTY

MACQUIGG, David Ellison, b 15, mc Ohio State 43, recip. Ohio 72, Rt. I, Box 153-A, Lexington 35648. GP.

removed

LEE COUNTY

MOLITOR, John Thomas, Removed

CULLMAN COUNTY

WEATHERS, Bobby Wayne, Removed.

transferred

CULLMAN COUNTY

NEUMASTER, Terry D., Pineview Hospital, Box 31, Hartselle 35640. From Morgan County Medical Society.

deceased

CALHOUN COUNTY

MITCHELL, William Bruce,—4/3/76

JEFFERSON COUNTY

HOGAN, Marshall D.,—9/72 ■

Case Against Medical Ethics

In a motion for summary judgment to dismiss a Federal Trade Commission complaint charging that the AMA's *Principles of Medical Ethics* act as a restraint of trade, the AMA said the FTC lacks jurisdiction to attempt to bar ethical restrictions on the solicitation of patients by physicians.

The AMA held that it is not a trade association and noted that a similar case against the Kansas City Area Hospital Assn, was found to be outside the commission's jurisdiction. In that case the courts held that the FTC did not have the legal authority to attempt to interfere with the operations of a non-profit association.

An administrative trial is scheduled to begin Oct. 18. ■

New physicians licensed to practice in Alabama



Ryce, Patrick Earl, M.D., LSU School of Medicine, 1974. Reciprocity with Louisiana (FLEX). Location: Birmingham.



Caldwell, William David, M.D., Tulane University School of Medicine, 1973. Reciprocity with Louisiana (FLEX). Location: Birmingham.



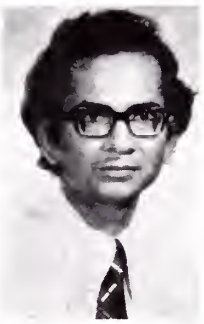
Grossman, Joel Steven, M.D., Jefferson Medical College (Philadelphia), 1967. Reciprocity with National Board of Medical Examiners. Specialty: Radiology. Location: Mobile.



Saguier, Emiliano Victor, M.D., Fac. Med. Univ. Nat'l. (Paraguay), 1965. Reciprocity with New York (FLEX). Specialty: Urology. Location: Langdale.



Caplash, Vijay Kumar, M.D., Gov't. Med. Col. Rohtak India, 1966. Reciprocity with Kentucky. Specialty: Nephrology, Internal Medicine. Location: Birmingham.



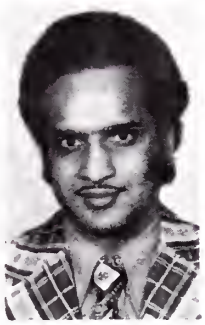
Parghi, Ajay Hariprasad, M.D., Med. Col. Baroda University (India), 1968. Reciprocity with Maine (FLEX). Specialty: Radiology. Location: Winfield.



Shannon, Wendell Kirk, M.D., University of Alabama School of Medicine (Birmingham), 1974. State Board Examination.



Drane, William Douglas, M.D., University of Kentucky College of Medicine, 1973. Reciprocity with National Board of Medical Examiners.



Prasad, Gunturu Babu Rajendra, M.D., Guntur Medical College (India), 1971. Reciprocity with Illinois (FLEX). Specialty: Anesthesiology. Location: Tuscaloosa.



Shappley, Nathan P., III, M.D., University of Mississippi School of Medicine, 1970. Reciprocity with Mississippi. Specialty: Urology. Location: Maxwell AFB.



Feldman, John Emerson, M.D., Cornell University Medical College, 1968. Reciprocity with National Board of Medical Examiners. Specialty: Internal Medicine. Location: Mobile.



Rippy, Girard Crawford, Jr., M.D., Duke University School of Medicine, 1954. Reciprocity with North Carolina. Specialty: OB/GYN. Location: Birmingham.



Slagel, Whylie Aaron, M.D., University of Kentucky College of Medicine, 1968. Reciprocity with Kentucky. Location: Birmingham.



Physicians' placement service in Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, 19 South Jackson Street, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

General Practice-Radiology, Diagnostic: Age 30; Osmania University 1968; American Board eligible-radiology; seeking multi-specialty group, single specialty group, partnership, institutional, emergency room, solo, or other. Available July 1976. LW - 02611

Family Practice: Age 31; Howard University 1973; American Board eligible; seeking partnership, multi-specialty group, solo, single specialty group, or other. Available July 1976. LW-03522.

Pediatrics-Family Practice: AGe 32; Osmania University 1966; American Board certified; seeking multi-specialty group, institutional, or single specialty group. Available July 1976. LW-00635.

Orthopedic Surgery: Age 42; University of Washington 1962; American Board certified; seeking solo or limited partnership, preferably near Gulf Coast, 100,000 plus population. Available December 1976. LW-1.

Orthopedic Surgery: Age 36; University of Maryland 1966; National Board; American Board certified; seeking single specialty group, partnership, multi-specialty group or solo. Available August 1976. LW-03545.

Internal Medicine-Emergency Medicine: Age 29, Medical College of Alabama 1972; National Board certified; American Board eligible; seeking emergency room, industrial, or multi-specialty group. LW - 03382

Internal Medicine: Age 27; University of Miami 1973; National Board certified; American Board eligible; seeking single specialty group, partnership, multi-specialty group, or solo. Available July 1976. LW - 02551

Internal Medicine-Gastroenterology: Age 33; Medical College of Virginia 1969; National Board certified; American Board eligible; seeking multi-specialty group, institutional, single specialty group, or partnership. Available August 1976. LW - 02599

Internal Medicine-Gastroenterology: Age 33; University of Iowa 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership. Available July 1976. LW - 01817

Internal Medicine: Age 32; University of Kentucky 1970; National Board certified; American Board eligible; seeking solo, partnership or research. Available July 1976. LW - 03320

Pediatrics: Age 30; SUNY Upstate New York 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership, solo, or other. Available July 1976. LW - 02336

Surgery: Age 38; Jefferson Medical College 1966; National Board certified; American Board certified; seeking single specialty group, partnership, multi-specialty group. Available August 1976. LW - 02968

Surgery: Age 34; Loyola University Stritch 1968; National Board certified; American Board eligible; seeking partnership, single specialty group, multi-specialty group, solo, or institutional. Available August 1976. LW - 02954

PHYSICIANS WANTED

(Opportunities For Practice)

GENERAL SURGEON needed in progressive rural community of about 1,000 people with trade area of 20,000 for 36 bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-14

Physicians wanted **(General Internal Medicine, Gastroenterologist, Dermatologist)** Trade area, 400,000 population Population of town: 45,000, located in Northeast Alabama Small town advantages with big city conveniences within hour's drive. Ground floor professional opportunity to join a group of internists in the development of programs in General Internal Medicine, medical specialties, and other disciplines appropriate for the establishment of a regional multispecialty health clinic. Financial arrangements negotiable. No investment necessary. Opportunity for partnership in two years. PW-8

A community with combined population of 10,000 located near Mobile, Alabama is seeking a **general practitioner** Office space available with living quarters. Several churches and schools. PW-9

General Practitioner's 2 family physicians wanted for general practice in a 64-bed hospital, located between 2 North Alabama towns (in the heart of the Tennessee Valley) with a trade population of 18,000. Office space available. Within 35 miles of large city. Large amount of industrial work in our area. PW-7

WANTED—**General Internist** or Subspecialist with interest in general medicine. University town, population approximately 60,000, to join 4 other internists in a multi-specialty clinic setting; 250-bed expanding general hospital; all specialty coverage, office expansion in progress; attractive living area. PW-11

Tri-community area of approximately 20,000 population located in a tri-city area of approximately 200,000 population in south central Alabama is seeking a **General Practitioner**. Existing building available for renovating Churches, schools, recreational facilities; also military privileges and services available in the area. PW-1.

Opportunity for **General Practitioner** in town of 3,000 population; trade area 16,000 population located in southeast Alabama, within short distance of city of 35,000 population where there are two hospitals. Located 85 miles from Gulf Coast beaches. Office space and equipment available. Last physician in town died two years ago. Industrial and farming area. Churches, schools and recreational activities. PW-2.

Opportunity for **General Practitioner** in town of 4,000 population; trade area 30,000 population located in southeast Alabama within short distance of hospitals. One g.p. and two dentists presently in the town. Agricultural and industrial area. PW-3.

General Practitioner—Opportunity in central Alabama town of 5,000 population, with a trade area of 30,000 population. Located 30 miles east of Montgomery, Alabama, and 28 miles west of Auburn University. Adjacent to Lake Martin. A new 77-bed hospital with a new Medical Arts Complex adjoining with office space available. Guaranteed income for a General Practitioner or Family Physician. PW-4.

General Surgeon needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36-bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-13/1.

Full-time Faculty Position: Board Certified **Family Physician** to teach/practice in new and growing medical school. Teach family practice residents/medical students. Competetive salary/fringe benefits. An affirmative action/equal employment opportunity employer. PW-5.

GENERAL PRACTITIONER needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36 bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-13

General Surgeon wanted. Tremendous opportunity to associate with General Surgeon in North Ala. Located in the heart of Tennessee Valley Mountain Lake Region. Small town setting, pop. 10,000. Two hospitals (300 beds), ten minutes from Decatur, pop. 45,000. Thirty minutes from Huntsville. Unlimited recreational activities; golf, tennis, sailing. Excellent school system and cultural activities. PW-12 ■

LOCATIONS WANTED

Locum Tenens – Age 30; Georgetown University 1971, National Board, American Board eligible, interested in general medicine, pediatrics, or emergency room coverage. Available July 1 - Sept. 1, 1976, preferably in northeast Alabama, Anniston, Gadsden, or Birmingham area.

Digest of actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the May 19 meeting of the State Board of Censors:

- Approved financial statement for period ending April 30, 1976, showing receipts of $82,694.92 and disbursements of $148,992.27.
- Approved expenses for resident (Stephen G. Lauten, M.D.) to attend the AMA Annual Convention, June 26-July 1, 1976, Dallas, Texas.
- Nominated Dr. Ronald E. Henderson to succeed Dr. Paul W. Burleson for a term expiring July 28, 1980, and Dr. Samuel F. Crabtree to succeed Dr. J. W. Denson for a term expiring July 28, 1981, on Advisory Board to the University of Alabama School of Medicine.
- Received as information nominations to the AMA's Council on Medical Service—Julius N. Hicks, M.D., Birmingham; and Council on Scientific Affairs—S. Richardson Hill, M.D., Birmingham.
- Received as information letter of opposition from Marshall County Medical Society regarding establishment of outpatient clinic in New Hope by the University System, and agreed in principle that family practice residents may be trained in rural areas.
- Received as information letter from Lauderdale County Medical Society expressing opposition to PSRO as formulated by the Social Security Act and enforced by the Department of Health, Education and Welfare.
- Granted appeal requested by the Medical Services Administration for decision of the District 15 Peer Review Committee; date of appeal – June 16, 1976.
- Instructed Secretary-Treasurer of Association to present to the Board at its next meeting a plan to manage the countersuit fund.
- Received as information JUA bill.
- Voted to give the Board's ad hoc committee on malpractice insurance authority to commit sufficient funds to meet expenses incurred in the organization of a mutual insurance company.
- Voted to change "Insurance Committee" to "Council on Socio-Economics or its designate" wherever "Insurance Committee" is used in the MASA Eligibility Standards for MASA Professional Liability Insurance Program.
- Designated the President of MASA as temporary administrator of MASA's pension plan in order to file the necessary forms with the Department of Labor by May 30, 1976, and entitled the plan "MASA Employee Pension Fund."
- Instructed the Pension Committee, composed of William L. Smith, M.D., Haynes C. Byrne, M.D., L. P. Patterson, Larry D. Dixon and James L. Stallings, to present proposed pension plan to the Board for consideration.
- Endorsed sponsorship of seminars within the State on local implementation of PSRO. ■

Auxiliary

Mrs. George F. Scofield
President

THE PRIVILEGE OF DOING



THE doctor's wife of 1776, flocked with children and chores, had an expected life span of 35.5 years and little enough time for the work of her own family's survival. Today's wife of 1976, blooming with health and mobility, can expect to live 71.9 years with an open option on what she will do. We have this legacy of more than 36 years. What use will we make of them?

I offer to you this year – beginning the third century of America – this theme for the Auxiliary to the Medical Association of the State of Alabama: the privilege of doing. This comes from Dr. Albert Schweitzer. "It is not enough merely to exist. You must give some time to your fellow man, even if it is a little thing. Do something for those who need man's help, for which you get no other pay but the privilege of doing."

MEDICAL AUXILIARY is an unique organization, a special group. We all choose to belong to many kinds of groups – some social, some service, some professional, some religious and some with mutual interests. Yet, we did not choose Medical Auxiliary. We chose a man, a doctor, or he or she chose us and through that doctor we became part of this group. Medical Auxiliary spans all these groups.

Let me offer to you this year the "privilege of doing." Doing much to inform and educate first ourselves so that we may make our own family's health better. Doing much in our communities to help our mates as they work for better health care. Doing much to tell the story of medicine. Doing what we can in the area of preventive medicine.

Take a look at yourself, your mate, your family and your community. You will see needs waiting to be met. Your service, your gift of yourself to others, not only will make your community finer and better but yourself as well.

IT WOULD BE EASY to say "Let's meet in Mobile at Convention time next year and greet and meet", but it is not in our plans to take a sabbatical leave. Let's just say along with Charles Kinsley: "Thank God every morning when you get up that you have something to do that day which must be done – whether you like it or not. This will breed in you temperance and self-control, diligence and strength of will, cheerfulness and content and a hundred other virtues which the idle will never know." ■

Pres.—Mrs. George F. Scofield/Pres.-Elect—Mrs. John S. Taylor/First Vice-Pres.—Mrs. Aubrey Terry/NE Vice-Pres.—Mrs. Eugene H. Bradley/SE Vice-Pres.—Mrs. Rufus Lee/SW Vice Pres.—Mrs. William P. Basoon/NW Vice-Pres.—Mrs. Wilfred Yeargan/AMASA Editor—Mrs. William Smith.

AMA-ERF CHECKS

The AMA-ERF checks for 1975 were presented to the deans of the medical schools at the Auxiliary Luncheon and Bicentennial Fashion Show at the Lamplighter Dinner Theatre April 15th, 1976. This was one of the highlights of the Auxiliary's convention April 15th-16th in Montgomery.

Dean James A. Pittman Jr., Executive Dean of the Medical College of Alabama, received a check for $22,645.62. This was presented by Mrs. Howard Johnson, Alabama AMA-ERF co-chairman. This included checks for the School of Primary Medical Care at Huntsville and the College of Community Health Sciences at Tuscaloosa.

Dean Alan M. Siegal, Dean of the University of South Alabama College of Medicine, received a check for $3,445.26 presented by Mrs. Donald O'Brien, Alabama AMA-ERF co-chairman.

Dean Pittman pointed out that these funds were especially needed to keep the successful MIST program in operation. He presented framed testimonials to Mrs. Howard Johnson of Sheffield and Mrs. Ben Johnson of Bessemer for their years of effective service to the Auxiliary's AMA-ERF effort.

Mrs. Donald J. O'Brien
Florence, Alabama ■

GOD, GIVE US "DRIVE" BUT KEEP US FROM BEING "DRIVEN"

There's a difference between "drive" and "driven"–
The one is selfish the other God-given–
For the "driven man" has but one goal,
Just worldly wealth and not "riches of soul,"
And daily he's spurred on to reach and attain
A higher position, more profit and gain,
Ambition and wealth become his great need
As daily he's "driven" by avarice and greed...
But more blessed are they who use their "drive"
To work with zeal so all men may survive,
For while they forfeit great personal gain
Their work and their zeal are never in vain...
For they contribute to the whole human race
And we cannot survive without growing in grace,
So help us, dear God, to choose between
The "driving force" that rules our routine
So we may make our purpose and goal
Not power and wealth but the growth of our soul...
And give us *strength* and *drive* and *desire*
To raise our standards and ethics higher
So all of Us and not *just a few*
May live on earth...*as You want Us to.*

Helen Steiner Rice





(Photo Left) Dean Pittman receives check for the Medical College of Alabama from Mrs. Howard Johnson while (Photo Above) Dean Siegal was on hand to receive check for University of South Alabama College of Medicine from Mrs. O'Brien.

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ALABAMA DEPARTMENT OF PUBLIC HEALTH:

Bureau of Preventable Diseases

FREDERICK S. WOLF, M.D., DIRECTOR

MORE ON SWINE INFLUENZA

The following comments provide a background and general information on the rationale for the public health "prevention" program against this potentially dangerous virus.

Perhaps as many as 95% of individuals over 50 years of age have antibodies to swine virus influenza. Under age 50 years from 0 to 2% of tested individuals will have similar antibodies. Whether or not this is the same or similar influenza virus that provided the pandemic of 1918-1919, the wide prevalence of antibodies in the age group of 50 years and over suggests swine influenza or similar virus was present in the population. Since isolation of the influenza virus was first made in the early 1930's, we are dependent upon inductive reasoning for this theory.

Chronologically, this is the known and confirmed data on swine influenza.

1960—Researchers' attempt to identify the virus was unsuccessful.

1974—One isolated case of swine influenza in a patient in Minnesota.

1975—One case in Wisconsin and one in Mississippi.

(These three individuals had been in contact with swine before their illness.)

1976—Fort Dix, New Jersey. Occurring here was an outbreak of A/Victoria influenza at the same time as there was a smaller outbreak of swine influenza confirmed by five viral isolates, seven sero-conversions, and 273 single positive sera (one death in the first seven reported cases). This was considered to have demonstrated human to human transmission in a military setting.

1976—Two civilian cases in Virginia, one of whom had swine contact prior to illness; for the other no source could be found.

1976—A military recruit from Pennsylvania with swine influenza gave the illness to 4 of 11 family members, none of whom had a history of swine contact. No community spread was demonstrated.

1976—Two Alabama recruits were among the involved Ft. Dix soldiers. The family of one had negative serologies and no history of swine contact. The other recruit had a history of abattoir employment and serologic tests for swine virus were positive in family (household) members.

The A/Swine strain differs in major fashion from the present A/Victoria strain and therefore might be expected to cause a pandemic, if, as accumulating evidence suggests, it is now affecting humans.

GONORRHEA—March, 1976

Total Female Specimens	21,863
Positive Cultures	.971
Positive	4.4%
Submitted from Private Practice	12,603
Positive Cultures	.248
Positive	2.0%

VENERAL DISEASE

A very simple but direct questionnaire was recently mailed to 200 randomly selected general practitioners, internists, urologists, and gynecologists. 180 responded to the inquiry, "How do you treat infectious syphilis?" and "How do you treat gonorrhea?"

For the treatment of infectious syphilis only 60 provided therapy according to the recommendations of the Center for Disease Control (HEW). These recommendations have for several years been widely publicized in Alabama.

For the treatment of gonorrhea only 80 provided therapy according to these same widely publicized recommendations.

CURRENT MORBIDITY STATISTICS

	March	April	*E.E April
Tuberculosis	55	57	91
Syphilis	44	40	46
Gonorrhea	2,613	1,734	739
Chancroid	0	1	0
Typhoid fever	0	0	0
Salmonella	17	24	18
Undulant fever	0	0	0
Shigella	8	9	8
Amebic dysentery	1	0	0
Scarlet fever & strep. throat	664	545	435
Diptheria	0	0	0
Whooping cough	0	0	3
Meningitis	12	10	8
Tularemia	0	0	0
Tetanus	0	0	0
Poliomyelitis	0	0	0
Encephalitis	1	0	0
Smallpox	0	0	0
Measles	0	0	2
German measles	0	0	17
Chickenpox	76	35	128
Mumps	25	46	65
Hepatitis	42	45	39
Typhus fever	0	0	0
Rocky Mt. spotted fever	1	0	0
Malaria	0	0	0
Rheumatic fever	4	4	10
Rheumatic heart	10	19	21
Influenza	617	311	145
Pneumonia	378	306	334
Rabies–Human cases	0	0	0
Pos. animal heads	0	2	0

As reported by physicians and including deaths not reported as cases. *E.E.—The estimated expectancy represents the median incidence of the past nine years.

DARKFIELD MICROSCOPY is available to physicians at no cost by calling 832-3205 at any time. A technician and equipment will be dispatched to your office.

Digest of actions—State Committee of Public Health

The State Committee of Public Health at its regular meeting on May 19, 1976 took the following actions:

Approved regulation authorizing operation procedures for the Gas Chromotograph Intoximeter previously approved by the Committee for breath testing of alleged intoxicated drivers.

Extended for one year the employment of Dr. J. B. Stapleton as Houston County Health Officer.

Received report regarding location of 240 granny midwives in 44 counties and location of maternity clinics in 8 counties. Was advised that 55,769 births were in hospitals during 1975 out of a total of 57,302. Midwife attended births numbered 1,315.

Was advised that the Aldridge Water System was notified to boil their drinking water due to the questionable quality of water source, storage tank and low pressure. This order was effective January 30, 1976.

Received information on the proposed influenza vaccination program to be initiated the first week in September beginning in Jefferson County.

Was advised that the Council on Prevention of Disease and Medical Care had elected Dr. James A. Pittman, Jr. as Chairman of this Council, and welcomed him as an official member of the State Committee of Public Health.

Disapproved application for Lowndes County Health Services Association due to high cost of the total project which was over $100 per projected outpatient visit and lack of evidence of support by the County Medical Society.

- Received notice of approval of the 1976 Alabama Master Hospital Plan by DHEW.
- Concurred in submission of remedial plan for funding outpatient facilities under Hill-Burton Act and approved Amendment No. 2 to the FY76 Alabama Master Hospital Plan dealing with poverty area designation to include the median family income of under $5,140.
- Approved applications for 1122 certificates for Ozark Nursing Home, Inc., Ozark for the addition of 17 beds and Jackson Hospital and Clinic, Montgomery, for 10 Renal Dialysis Units. Disapproved the following: (a) Houston County Nursing Homes, Dothan, request for 53 new bed construction; (b) Dothan Nursing Home, Dothan, 53 bed addition to existing facility; (c) Southeast Alabama Dialysis Center, Montgomery, for 12 Hemodialysis Units in an outpatient center; and (d) Oak View Manor Nursing Home, Ozark, for a 17 bed addition.
- The Committee approved transfer of 14 beds from Jackson to Thomasville and disapproved request for 36 additional beds for Clark County.
- Made additional provisions for certifying professional abusers for overutilization of services under Medicaid.
- Approved three Plan Amendments for Medicaid, one of

CONTINUED ON PAGE 66

New from Lilly/Dista Research

NALFON®

fenoprofen calcium

300-mg.* Pulvules®

DISTA

Dista Products Company
Division of Eli Lilly and Company
Indianapolis, Indiana 46206

Additional information available to the profession on request.

*Present as 345.9 mg. of the calcium salt of fenoprofen dihydrate equivalent to 300 mg. fenoprofen.

CDC Report: Syphilis

Current Trends

Syphilis — CDC Recommended Treatment Schedules, 1976

The following recommendations were established by the Venereal Disease Control Advisory Committee after deliberation with therapy experts.

Few data have been published on the treatment of syphilis since CDC revised these recommendations in 1968. Penicillin continues to be the drug of choice for all stages of syphilis. Every effort should be made to document penicillin allergy before choosing other antibiotics because these antibiotics have been studied less extensively than penicillin. Physicians are cautioned to use no less than the recommended dosages of antibiotics.

EARLY SYPHILIS (primary, secondary, latent syphilis of less than 1 year's duration)

(1) Benzathine penicillin G — 2.4 million units total by intramuscular injection at a single session. *Benzathine penicillin G is the drug of choice because it provides effective treatment in a single visit.*† OR

(2) Aqueous procaine penicillin G — 4.8 million units total: 600,000 units by intramuscular injection daily for 8 days. OR

(3) Procaine penicillin G in oil with 2% aluminum monostearate (PAM) — 4.8 million units total by intramuscular injection: 2.4 million units at first visit, and 1.2 million units at each of 2 subsequent visits 3 days apart. *Although PAM is used in other countries, it is no longer available in the United States.*

Patients who are allergic to penicillin:

(1) Tetracycline hydrochloride†† — 500 mg 4 times a day by mouth for 15 days. OR

(2) Erythromycin (stearate, ethylsuccinate or base) — 500 mg 4 times a day by mouth for 15 days.

These antibiotics appear to be effective but have been evaluated less extensively than penicillin.

SYPHILIS OF MORE THAN 1 YEAR'S DURATION (latent syphilis of indeterminate or more than 1 year's duration, cardiovascular, late benign, neurosyphilis)

(1) Benzathine penicillin G — 7.2 million units total: 2.4 million units by intramuscular injection weekly for 3 successive weeks. OR

(2) Aqueous procaine penicillin G — 9.0 million units total: 600,000 units by intramuscular injection daily for 15 days.

The optimal treatment schedules for syphilis of greater than 1 year's duration have been less well established than schedules for early syphilis. In general, syphilis of longer duration requires higher-dose therapy. Although therapy is recommended for established cardiovascular syphilis, there is little evidence that antibiotics reverse the pathology associated with this disease.

Cerebrospinal fluid (CSF) examination is mandatory in patients with suspected, symptomatic neurosyphilis. This examination is also desirable in other patients with syphilis of greater than 1 year's duration to exclude asymptomatic neurosyphilis.

†Italics indicate commentary.

Published studies show that a total dose of 6.0-9.0 m lion units of penicillin G results in a satisfactory clinic response in approximately 90% of patients with neur syphilis. There is more published clinical experience wi short-acting penicillin preparations than with benzathir penicillin G. Some clinicians prefer to hospitalize patien with neurosyphilis, particularly if the patient is sympt matic or has not responded to initial therapy. In these i stances they treat patients with 12-24 million units aqueous crystalline penicillin G given intravenously eac day (2-4 million units every 4 hours) for 10 days.

Patients who are allergic to penicillin:

(1) Tetracycline hydrochloride — 500 mg 4 times day by mouth for 30 days. OR

(2) Erythromycin (stearate, ethylsuccinate or base) 500 mg 4 times a day by mouth for 30 days.

There are NO published clinical data which adequate document the efficacy of drugs other than penicillin f syphilis of more than 1 year's duration. Cerebrospinal flu examinations are highly recommended before therapy wit these regimens.

SYPHILIS IN PREGNANCY Evaluation of Pregnant Wom

All pregnant women should have a nontreponemal ser logic test for syphilis, such as the VDRL or RPR test, the time of the first prenatal visit. The treponemal tes such as the FTA-ABS test should not be used for routin screening. In women suspected of being at high risk f syphilis, a second nontreponemal test should be performe during the third trimester. Seroreactive patients should b expeditiously evaluated. This evaluation should include history and phvsical examination, as well as a quantitativ nontreponemal test and a confirmatory treponemal tes

If the FTA-ABS test is nonreactive and there is no clin cal evidence of syphilis, treatment may be withheld. Bot the quantitative nontreponemal test and the confirmator test should be repeated within 4 weeks. If there is clinic or serologic evidence of syphilis or if the diagnosis of syph lis cannot be excluded with reasonable certainty, the p tient should be treated as outlined below.

Patients for whom there is documentation of adequat treatment for syphilis in the past need not be retreated u less there is clinical or serologic evidence of reinfection suc as darkfield-positive lesions or a 4-fold titer rise of a quant tative nontreponemal test.

A. For patients at all stages of pregnancy who are not a lergic to penicillin: Penicillin in dosage schedules appr priate for the stage of syphilis as recommended for th treatment of nonpregnant patients.

B. For patients of all stages of pregnancy who are allergi to penicillin: Erythromycin (stearate, ethylsuccinate c base) in dosage schedules appropriate for the stage c

††Food and some dairy products interfere with absorption. Or forms of tetracycline should be given 1 hour before or 2 hou after meals.

syphilis, as recommended for the treatment of nonpregnant patients. Although these erythromycin schedules appear safe for mother and fetus, their efficacy is not well established. Therefore, the documentation of penicillin allergy is particularly important before treating a pregnant woman with erythromycin. *Erythromycin estolate and tetracycline are not recommended for syphilitic infections in pregnant women because of potential adverse effects on mother and fetus.*

ollow-up

Pregnant women who have been treated for syphilis ıould have monthly quantitative nontreponemal serologic sts for the remainder of the current pregnancy. Women ho show a 4-fold rise in titer should be retreated. After elivery, follow-up is as outlined for nonpregnant patients.

ONGENITAL SYPHILIS

Congenital syphilis may occur if the mother has syphilis ıring pregnancy. If the mother has received adequate penillin treatment during pregnancy, the risk to the infant is inimal. However, all infants should be examined carefully birth and at frequent intervals thereafter until nontrepomal serologic tests are negative.

Infected infants are frequently asymptomatic at birth ıd may be seronegative if the maternal infection occurred te in gestation. Infants should be treated at birth if maırnal treatment was inadequate, unknown, with drugs other ıan penicillin, or if adequate follow-up of the infant canot be ensured.

Infants with congenital syphilis should have a CSF xamination before treatment.

Infants with abnormal CSF:

(1) Aqueous crystalline penicillin G, 50,000 units/kg intramuscularly or intravenously daily in 2 divided doses for a minimum of 10 days. **OR**

(2) Aqueous procaine penicillin G, 50,000 units/kg intramuscularly daily for a minimum of 10 days.

Infants with normal CSF:

Benzathine penicillin G, 50,000 units/kg intramuscularly in a single dose. *Although benzathine penicillin has been previously recommended and widely used, published clinical data on its efficacy in congenital neurosyphilis are lacking. If neurosyphilis cannot be excluded, the procaine or aqueous penicillin regimens are recommended. Since cerebrospinal fluid concentrations of penicillin achieved after benzathine penicillin are minimal to nonexistent, these revised recommendations seem more conservative and appropriate until clinical data on the efficacy of benzathine penicillin can be accumulated. Other antibiotics are not recommended for neonatal congenital syphilis.*

Penicillin therapy for congenital syphilis after the neonatal period should be with the same dosages used for neonatal congenital syphilis. For larger children the total dose of penicillin need not exceed the dosage used in adult syphilis of more than 1 year's duration. After the neonatal period, the dosage of erythromycin and tetracycline for congenital syphilitics who are allergic to penicillin should be individualized but need not exceed dosages used in adult syphilis of more than 1 year's duration. Tetracycline should not be given to children less than 8 years of age.

Table I. Summary—Cases of Specified Notifiable Diseases: United States

[Cumulative totals include revised and delayed reports through previous weeks]

DISEASE	13th WEEK ENDING		MEDIAN 1971–1975	CUMULATIVE, FIRST 13 WEEKS		
	April 3, 1976	March 29, 1975		April 3, 1976	March 29, 1975	MEDIAN 1971–1975
eptic meningitis	34	41	32	467	458	458
ucellosis	1	4	40	52	35	26
ickenpox	5,481	4,566	---	70,985	33,010	---
phtheria	1	12	4	85	121	51
cephalitis, Primary	16	15	16	195	155	218
cephalitis, Post-Infectious	10	15	6	62	63	60
patitis, Viral, Type B	270	200	166	3,495	2,622	2,421
patitis, Viral, Type A	676	667	996	9,020	9,026	12,800
patitis, Viral, Type unspecified	193	183		2,193	1,927	
laria	4	3	4	78	68	68
asles (rubeole)	1,494	782	1,178	11,335	6,308	9,191
ningococcal infections, total	40	24	50	524	448	448
Civilian	40	23	47	520	435	435
Military	–	1	2	4	13	14
imps	1,376	1,573	2,068	16,505	19,593	25,299
rtussis	24	16	---	277	293	---
bella (German measles)	490	619	954	4,403	4,263	8,747
tanus	–	2	2	7	15	15
berculosis	730	579	---	7,926	7,241	---
laremia	1	2	2	28	12	25
phoid fever	7	6	6	83	62	65
phus, tick-borne (Rky. Mt. spotted fever)	3	1	1	8	12	12
nereal Diseases:						
Gonorrhea, Civilian	17,427	17,821	---	240,719	230,381	---
Gonorrhea, Military	465	602	---	7,349	7,481	---
Syphilis, primary and secondary, Civilian	482	462	---	6,620	6,480	---
Syphilis, primary and secondary, Military	15	6	---	98	86	---
bies in animals	68	53	107	512	496	823

Table II. Notifiable Diseases of Low Frequency: United States

	CUM.		CUM.
thrax:	2	Poliomyelitis, total:	3
tulism:	5	Paralytic:	3
ngenital rubella syndrome:	7	Psittacosis: Calif. 1	21
prosy: Missouri 1, Tex. 2, Calif. 3, Hawaii 5	36	Rabies in man:	–
ptospirosis: Tex. 1	11	Trichinosis:	40
gue:	1	Typhus, murine: Tex. 7	5

elayed report: Alaska 5 (1975)

DIGEST OF ACTIONS
STATE COMMITTEE OF PUBLIC HEALTH

CONTINUED FROM PAGE 63

which equalized the application of the 75th percentile fee for all practitioners, clearing up minor inconsistencies.

- Received information regarding the drastic effects of reduced State funds on the Medicaid budget and the necessity for major decreases in services which would be required if the proposed State budget prevails.
- Considered certain medical safeguards for the Nurse Midwife Bill for consideration at legislative hearing during the same time the Committee was in session.
- Approved amendments for the Anti-Abortion Bill.
- Added Ytterbium 169 for Cisternography to the State List of Well Established Medical Radiopharmaceutical Uses.

■

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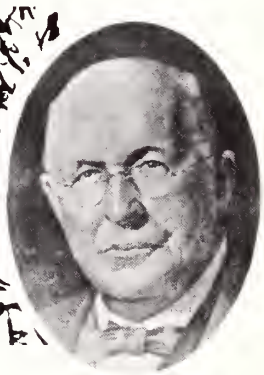
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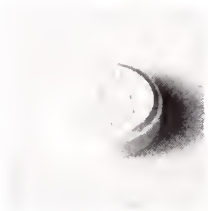
Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

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The JOURNAL

of the

Medical Association of the State of Alabama

VOLUME 45, NUMBER 12 JUNE 1976

Office of Publication

P. O. Box 1900-C Montgomery, Ala. 36104

Subscription Price $12.00 Per Year

$1.00 Per Copy

Second Class Postage Paid at Montgomery, Alabama. Published monthly by The Medical Association of the State of Alabama at 19 South Jackson Street, Montgomery, Alabama 36104.

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AT ONE O'CLOCK in the morning on September 9, 1902, in a rural shanty, Dr. L. L. Hill, of Montgomery, operated on a 13-year-old boy who had a stab wound of the heart. It was the first successful operation for cardiac injury in a human being ever performed in the United States.

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The operation cemented Dr. Hill's name forever among the list of America's most famous physicians.

THIS ISSUE of the *JOURNAL* attempts to salute the noble life of the late Dr. L. L. Hill and what he left to the practice of medicine. His office was located at 33 Perry Street in Montgomery, the same building used by Dr. J. Marion Sims as his clinic. The building is located in downtown Montgomery, one-half block from the Montgomery County Courthouse.

Two plaques have been erected on the front of the building, one to honor Dr. Sims and the other to honor Dr. Hill. The plaque in honor of Dr. Hill was presented to the City of Montgomery during MASA's Annual Session this year. ■

Birmingham Nutritionist Receives AMA Award

The AMA presented the 1976 Joseph Goldberger Award in Clinical Nutrition to Charles E. Butterworth, Jr., M.D., on Sunday, June 27, at the opening session of the House of Delegates during the AMA Annual Convention in Dallas.

The award consisted of a $1,000 check from The Nutrition Foundation, Inc., New York City, and a commemorative plaque presented annually by the AMA's Board of Trustees to a physician who has made significant contributions to the knowledge of nutrition. Recipients are nominated by the AMA Council on Foods and Nutrition and selected by the AMA Board of Trustees.

Dr. Butterworth, 53, is professor of medicine and pediatrics at the University of Alabama School of Medicine in Birmingham. Dr. Butterworth was educated in medicine at the University of Virginia in Charlottesville and at Jefferson-Hillman Hospital in Birmingham. ■

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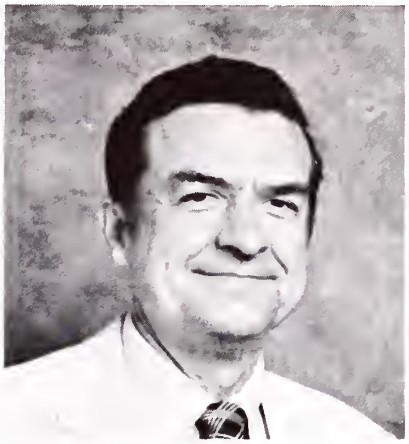
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Vacation Time



WILLIAM T. WRIGHT, M.D.

MUCH IS EXPECTED of physicians. We are people who are suppose to always show compassion for our fellowman by being pleasant, always being available, alert, sober, concerned and never lose our temper. This would be an inevitable feat if we could accomplish all of these goals, but we should be ever mindful that we are still the most respected profession of them all and we should try to live up to as many of these public expectations as possible.

One big factor to help us in obtaining personal happiness is the proper balance between work and play. Some doctors' lives get in jeopardy in these areas due to excess hours of work. Having been reared the son of a general practitioner in a very small Alabama town, I had seen the demands put on this type practitioner. So 15 years ago when my practice had become very demanding, my wife and I decided we would take at least six weeks away from the practice each year. This allows time for continuing education, family time and play time, which seems to me to be important.

Many of you will read this and say "no way can I do this," but I believe you will be more efficient and effective while you are there and available for the demands of medical practice. This will more than offset the time lost from practice.

A friend of mine told me by the time he loaded the family in the car and drove to Atlanta, he was a nervous wreck, so my advice to him was to fly. Some enjoy flying, the relaxation of a cruise, golf, fishing, boating, etc., but whatever brings you and your family happiness will probably make you a better doctor and will definitely improve the happiness of your wife and children if you are fortunate enough to have a family.

One of my friends who was the only physician in one community found that much to his surprise, when he went on vacation, his patients were able to get care at the next town and when he returned he felt much more able to cope with the daily challenges of practice.

Whether you like long vacations or frequent long week-ends, if you and the family are due for one now, please put down this Journal, start making plans and have a safe trip.

Bill

Postdoctoral Fellowships In Diabetes Research

The Juvenile Diabetes Foundation is supporting diabetic research by providing funds for postdoctoral fellowships. Grant applications are now being accepted for the funding year 1977-78.

Applications may be obtained from: Shel Sukoff, National Executive Director, Juvenile Diabetes Foundation, 23 East 26th Street, New York, New York 10010, (212) 689-7868.

Completed applications must be postmarked **not later than September 10, 1976.** Those being funded will be notified early in 1977 and funding will begin July 1, 1977. ■

"Physicians for the Day"

Arthur L. Ennis, M.D.
Gadsden, Alabama

Troy F. Kilpatrick, M.D.
Pinson, Alabama

Morgan J. Moore, M.D.
Andalusia, Alabama

William R. Gammon, M.D.
Sylacauga, Alabama

Clyde Cox, Jr., M.D.
Selma, Alabama

G. C. Hester, M.D.
Tuskegee, Alabama

Wm. J. Tally, M.D.
Gadsden, Alabama

J. W. Matthews, M.D.
Opelika, Alabama

JUNE 1976

for the inflamed phase of hemorrhoidal flare-up

Anusol-HC® Cream: Rx only. Each gram contains: Hydrocortisone Acetate 5.0 mg; Bismuth Subgallate 22.5 mg; Bismuth Resorcin Compound 17.5 mg; Benzyl Benzoate 12.5 mg; Peruvian Balsam 17.5 mg; Zinc Oxide 110.0 mg. Also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil and glyceryl monostearate. Non-staining.

Anusol-HC® Suppositories: Rx only. Each contains: Hydrocortisone Acetate 10.0 mg; Bismuth Subgallate 2.25%; Bismuth Resorcin Compound 1.75%; Benzyl Benzoate 1.2%; Peruvian Balsam 1.8%; Zinc Oxide 11.0%. Also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland, hydrogenated oil-cocoa butter base.

CAUTION: Federal law prohibits dispensing Anusol-HC® Cream and Anusol-HC® Suppositories without prescription.

for the maintenance and protection phase

Anusol Suppositories and Ointment: Except for hydrocortisone acetate, these forms contain the same percentages of active ingredients as listed above.

Contraindications: History of sensitivity to any component. Topical corticosteroids should not be employed in tuberculous, fungal and most viral lesions of skin (including herpes, vaccinia and varicella).

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy they should not be used unnecessarily on extended areas, in large amounts or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. When there is bacterial skin infection, topical corticosteroids should be used only with appropriate concomitant anti-microbial therapy. Prolonged or excessive use of corticosteroids might produce systemic effects.

Dosage and Administration: Anusol-HC Cream: *Adults*—Remove tube cap and attach the plastic applicator. After gentle bathing and drying of the area, apply to the exterior surface and gently rub in. For internal use, insert the applicator by applying gentle, continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories or Ointment.

Anusol-HC Suppositories: One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Anusol Suppositories: One in the morning, one at bedtime; and one immediately following each evacuation.

Anusol Ointment: Apply freely to the anoderm as often as necessary, usually 2 to 4 times a day.

Full information available on request.

Warner/Chilcott
Division,
Warner-Lambert Company,
Morris Plains,
New Jersey 07950

THE PROFESSIONAL SOURCE OF

COMFORT

FOR INTERNAL & EXTERNAL ANORECTAL CONDITIONS

Anusol-HC®

suppositories and cream
with hydrocortisone acetate. Rx only

pain and burning respond in minutes

• without belladonna alkaloids • without CNS stimulants



Artist's interpretation in bas-relief of external hemorrhoids, postoperative anorectal wounds and anal dermatitis.

Famous Fighters



NEOSPORIN® Ointment
(polymyxin B-bacitracin-neomycin)
is a famous fighter, too.

Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **AOVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

editorials editorials

Medical Societies With A Mission

Physicians in Houston County are the initiators of a unique approach in an effort to promote a spirit of cooperation between physicians and attorneys within the county.

During recent county society meetings, attorneys have been invited to attend and participate in the meetings; and Dr. Joseph H. Sugg, Dothan surgeon, reports that professional cooperation between Houston County physicians and attorneys has been strengthened as a result.

At one such meeting, Dr. Kermit Pitt, Decatur pediatrician, spoke on the malpractice situation in Alabama as it affects both professions. In July, the Houston County Medical Society will present a mini-seminar entitled "Proper Prescription Practices," with area pharmacists and representatives of the Alabama Drug Diversion Investigative Unit in attendance.

Dr. Sugg says that cooperative meetings such as these are an outgrowth of an idea modelled after that in Jefferson County and that the program of cooperation exemplified has exceeded all prospects.

Many county medical societies around the state have expressed interest in promoting programs for members which will enhance the good will between the professions and the community with a bond of "working together" the result. The efforts have paid off handsomely for Jefferson and Houston Counties and will pay dividends for other counties in the months to come.

Drug Substitution In Alabama

All of a sudden, drug substitution seems to have achieved health care spotlight for the time being. Bills have been introduced before the Alabama Legislature which would repeal Alabama's anti-substitution of prescription drugs law. Other states, likewise, are contending with this critical issue.

The Congress of County Medical Societies has announced their complete opposition to generic drug substitution because:

(1) Physicians must be in charge of drug therapy for the sake of the patients.

(2) Substitution is simply not safe.

(3) There is no evidence whatsoever that patients will save any money.

Both bills before the Alabama Legislature are now before the House and Senate Health Committees, respectively. Under the bills, when a pharmacist is requested to fill a prescription and "the customer specifically inquires about a less expensive substitute drug," the pharmacist may recommend a substitute and actually make the substitution if the customer agrees.

The *Journal* believes that physicians are fully aware of both sides of the issue and that an attempted review again of the issue would be only a pretentious stab at voluminous subject material. However, it is important to Alabama physicians and to the pharmaceutical industry that they be apprised of these measures and potential effect they may have.

A recent article in the *National Observer* reported that Florida now has a new state law requiring drugists to fill most prescriptions (except heart medication) with generic drugs instead of the usually more expensive, brand-name medicines. The Florida physician can avert the substitution by personally writing on prescriptions that brand-name drugs are medically necessary. One is anxious to see how this new law works out.

Our Men In Washington: How Do They Compare?

Do the people you send to Congress reflect your views on business and economic issues?

The Chamber of Commerce of the United States has evaluated individual voting records on a sampling of major issues of particular importance to the fields of business, labor, conservative, and liberal organizations. The rating also gives the individual a chance to compare the performance of his or her senators and representatives.

Included in the sampling are ratings by the Americans for Constitutional Action (ACA), which is strongly conservative; the Americans for Democratic Action (ADA), which is strongly liberal; and the AFL-CIO's Committee on Political Education (COPE), the political action arm of the giant labor federation.

Here is how all four organizations rate Alabama members of Congress:

SENATE				
SENATOR	ACA	ADA	COPE	NATIONAL CHAMBER
Sparkman (D.)	26	6	27	42
Allen (D.)	74	6	21	80

HOUSE				
Dist. Representative	ACA	ADA	COPE	NATIONAL CHAMBER
1. Edwards, J. (R.)	92	5	14	94
2. Dickinson (R.)	89	5	9	100
3. Nichols (D.)	81	5	17	59
4. Bevill (D.)	67	16	43	47
5. Jones, R. (D.)	38	37	86	20
6. Buchanan (R.)	79	21	27	88
7. Flowers (D.)	71	5	32	53

The figures shown represent percentages of votes, by the individual senator or representative, that were approved by each organization on a varying number of issues.

How does the performances of your senator and representative rate with you? ■



Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

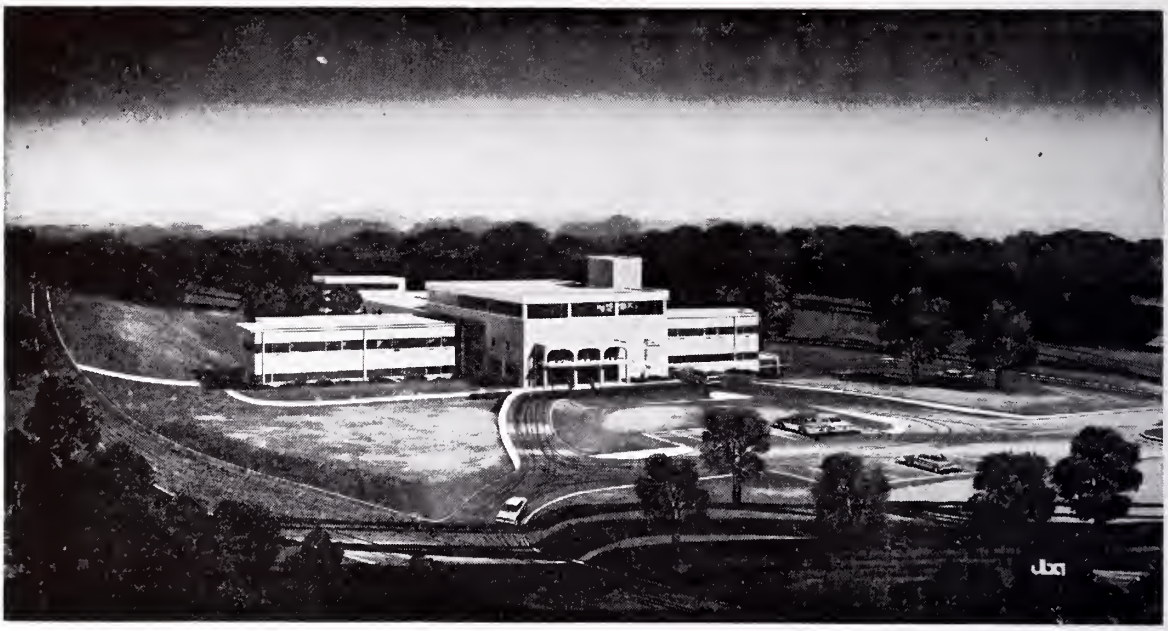
11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

P·M·A
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D. C. 20005



HILL CREST HOSPITAL — For Intensive Treatment of Psychiatric Disorders

This 113-bed non-governmental psychiatric hospital provides modern facilities for diagnosis and treatment of patients with all degrees of illness, including those who show severely disturbed behavior. Alcoholic and drug abuse patients are also accepted.

In addition to care by psychiatrists and by consultants in all medical specialties, the treatment program includes occupational, recreational, and physical therapy, social services, and tutoring. Emphasis is on short-term, intensive treatment of voluntary patients.

Hill Crest is a member of: American Hospital Association, National Association of Private Psychiatric Hospitals, Alabama Hospital Association, Birmingham Regional Hospital Council.

Accredited by Joint Commission on Accreditation of Hospitals. Medicare Approved. Blue Cross Participating Hospital.

HILL CREST HOSPITAL

HILL CREST FOUNDATION, INC.

6869 Fifth Avenue South **Birmingham, Alabama 35212**

PHONE: (205) 836-7201

12-hour claims
are nothing new.

12-hour relief is.



NEW

Novafed® A Capsules

Each capsule contains pseudoephedrine hydrochloride 120 mg. and chlorpheniramine maleate 8 mg.

Controlled-Release Decongestant Plus Antihistamine

It goes the distance.





Clinical studies confirm full 12-hour effectiveness.

For years, patients have heard of drugs providing long-lasting relief. But after six or eight hours, they often run out of relief. And it's too soon to take the next dose.

Now, with Novafed A, Dow introduces a prescription capsule with 12-hour effectiveness in relieving allergy and hay fever symptoms. Placebo-controlled clinical studies show that the high level of decongestant in Novafed A provides relief for as long as 12 hours. At the same time, its antihistamine relieves the patient's itchy eyes and runny nose *without* the excessive dryness of anticholinergic agents.

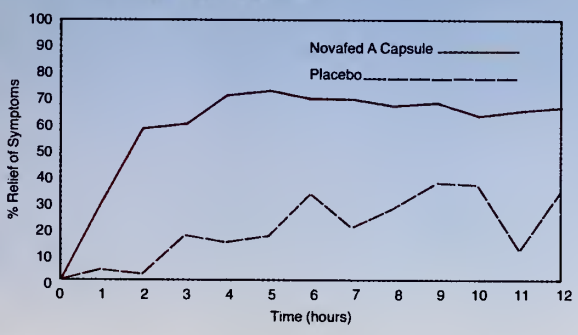
Prompt onset of effect is followed by full 12-hour relief.

(Please refer to the following page for bioavailability studies and prescribing information.)



Patients with severe pollen allergies were tested during hay fever season in a countryside environment and asked to rate severity of five different symptoms on a scale of 1 to 4.

Clinical Study: Degree of Relief from Itchy Eyes and Nose and Throat, Watery Eyes, Runny Nose*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DOW®

Specialists in Cough and Cold Care





NEW

Novafed® A Capsules

Each capsule contains pseudoephedrine hydrochloride 120 mg. and chlorpheniramine maleate 8 mg.

Controlled-Release Decongestant Plus Antihistamine

It goes the distance.



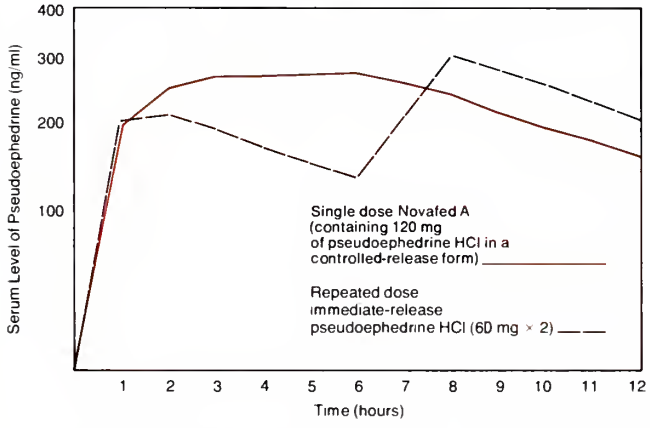
Prompt onset and sustained serum levels over 12 hours.

A bioavailability study confirmed that the sustained 12-hour action of Novafed A was comparable to that of immediate-release medication taken at 6-hour intervals.

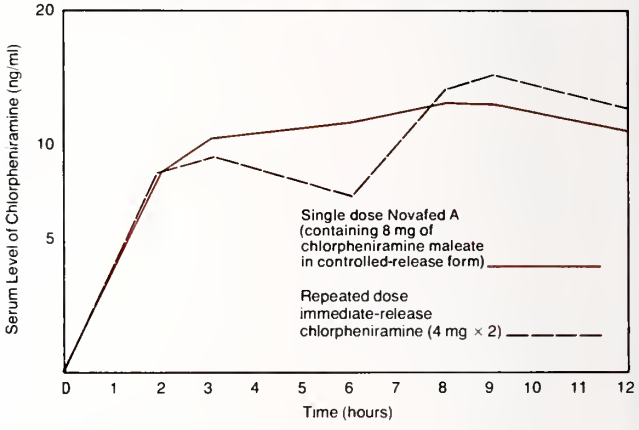
The chart at the left shows the serum levels of pseudoephedrine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 60 mg. pseudoephedrine hydrochloride in an immediate-release form. Serum levels of pseudoephedrine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

The chart at the right shows the serum levels of chlorpheniramine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 4 mg. chlorpheniramine maleate in an immediate-release form. Serum levels of chlorpheniramine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

Comparison of Mean Serum Levels of Pseudoephedrine Following Novafed A and an Immediate-Release Reference Formulation*



Comparison of Mean Serum Levels of Chlorpheniramine Following Novafed A and an Immediate-Release Reference Formulation*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DESCRIPTION: Each NOVAFED A capsule contains 120 mg. of pseudoephedrine hydrochloride and 8 mg. of chlorpheniramine maleate. The specially formulated pellets in each capsule are designed to provide continuous therapeutic effect for about 12 hours. Nearly one-half of the active ingredients is released soon after administration and the remainder is released slowly over the remaining time period.

ACTIONS: NDVAFED A combines the action of a nasal decongestant, pseudoephedrine hydrochloride, and an antihistamine, chlorpheniramine maleate. These ingredients are combined to provide prompt and sustained nasal and upper respiratory decongestant and antihistaminic action.

INDICATIONS: NDVAFED A is indicated for the relief of nasal congestion and eustachian tube congestion associated with the common cold, sinusitis and acute upper respiratory infections. It is also indicated for perennial and seasonal allergic rhinitis, vasomotor rhinitis, allergic conjunctivitis due to inhalant allergens and foods and for mild, uncomplicated allergic skin manifestations of urticaria and angioedema. Decongestants in combination with antihistamines have been used for many years to relieve eustachian tube congestion associated with acute eustachian salpingitis, aerotitis media, acute otitis media and serous otitis media. NOVAFEO A may be given concurrentiy, when indicated, with analgesics and antibiotics.

CONTRAINDICATIONS: Symphathomimetic amines are contraindicated in patients with severe hypertension, severe coronary artery disease, and in patients on MAO inhibitor therapy. Antihistamines are contraindicated in patients with narrow-angle glaucoma, urinary retention, peptic ulcer, during an asthmatic attack, and in patients receiving MAO inhibitors.

Children under 12: NDVAFED A controlled-release capsules should not be used in children less than 12 years of age.

Nursing Mothers: Pseudoephedrine is contraindicated in nursing mothers because of the higher than usual risk for infants from sympathomimetic amines.

Hypersensitivity: This drug is contraindicated in patients with hypersensitivity or idiosyncrasy to sympathomimetic amines or antihistamines. Patient idiosyncrasy to adrenergic agents may be manifested by insomnia, dizziness, weakness, tremor or arrhythmias.

WARNINGS: Sympathomimetic amines should be used judiciously and sparingly in patients with hypertension, diabetes mellitus, ischemic heart disease, increased intraocular pressure, hyperthyroidism, or prostatic hypertrophy. Sympathomimetics may produce central nervous system stimulation and convulsions or cardiovascular collapse with accompanying hypotension.

Antihistamines may impair mental and physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery, and mental alertness in children. Chlorpheniramine maleate has an atropine-like action and should be used with caution in patients with increased intraocular pressure, hyperthyroidism, cardiovascular disease, hypertension or in patients with a history of bronchial asthma.

Oo not exceed recommended dosage.

Use in Pregnancy: The safety of pseudoephedrine for use during pregnancy has not been established.

Use in Elderly: The elderly (60 years and older) are more likely to have adverse reaction to sympathomimetics. Overdosage of sympathomimetics in this age group may cause hallucinations, convulsions, CNS depression, and death. Therefore, safe use of a short-acting sympathomimetic should be demonstrated in the individual elderly patient before considering the use of a sustained-action formulation.

PRECAUTIDNS: This drug should be used with caution in patients with diabetes, hypertension, cardiovascular disease and hyperreactivity to ephedrine. The antihistaminic may cause drowsiness and ambulatory patients who operate machinery or motor vehicles should be cautioned accordinoly.

ADVERSE REACTIONS: Hyperreactive individuals may display ephedrine-like reactions such as tachycardia, palpitations, headache, dizziness, or nausea. Patients sensitive to antihistamines may experience mild sedation.

Sympathomimetic drugs have been associated with certain untoward reactions including fear, anxiety, tenseness, restlessness, tremor, weakness, pallor, respiratory difficulty, dysuria, insomnia, hallucinations, convulsions, CNS depression, arrhythmias, and cardiovascular collapse with hypotension.

Possible side effects of antihistamines are drowsiness, restlessness, dizziness, weakness, dry mouth, anorexia, nausea, headache and nervousness, blurring of vision, heartburn, dysuria and very rarely, dermatitis.

DRUG INTERACTIDNS: MAO inhibitors and beta adrenergic blockers increase the effect of sympathomimetics. Sympathomimetics may reduce the antihypertensive effects of methyldopa, mecamylamine, reserpine and veratrum alkaloids. Concomitant use of antihistamines with alcohol, tricyclic antidepressants, barbiturates and other central nervous system depressants may have an additive effect.

OOSAGE AND ADMINISTRATION: One capsule every 12 hours. Do not give to children under 12 years of age.

CAUTION: Federal law prohibits dispensing without prescription.

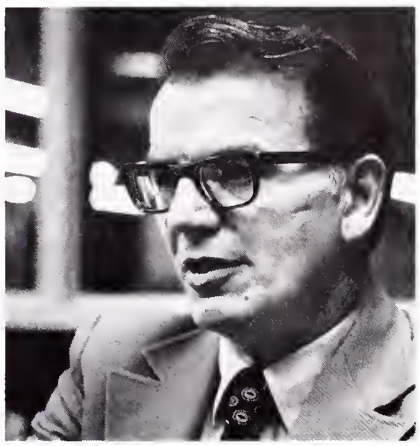
HDW SUPPLIED: NOVAFED A is supplied in red and orange colored hard gelatin capsules, monogrammed with the Dow diamond followed by the number 109, in bottles of 100.

DOW

DOW PHARMACEUTICALS
The Dow Chemical Company
Indianapolis, IN 46268

Specialists in cough and cold care

"Disaster struck on August 15. I don't know anybody who could have responded as fast as Bell."



Mr. Kenneth A. Howd
Distribution Center Manager
B. F. Goodrich
Birmingham, Alabama

B. F. Goodrich in Birmingham is a service organization distributing tires, hose, belting, and matting in 13 southeastern states. Telephone communications is the heart of their operation. And Bell was there to help when they needed help the most. Let Mr. Howd tell you:

"Forty thousand gallons of water dumped through our roof. The storm practically wiped us out. One dry phone got us in touch with the outside. Soon, Bell people were everywhere getting our telephone system back in order. Damaged equipment was replaced. And we weren't even billed for it."

When you have Bell equipment, you're backed by fast, *total* service whenever you need it. And you don't pay extra. If you're thinking of updating your business phone system, call a South Central Bell Communications Consultant and get the Bell story on equipment, actual cost and total service.

South Central Bell

The Month In Washington

Clinical Labs—The Senate has passed 64-11 a bill broadening federal authority over clinical laboratories to include those engaged in intrastate operations and giving the government firmer standards control.

Under the legislation, HEW theoretically could apply the controls to individual physicians' offices. As a condition of such exemption, physicians who use their offices as labs as an adjunct for treating their own patients would have to describe the qualifications of non-physician personnel who do lab work, how much they do, and the score each shows in any proficiency testing.

***

NHI and Taxes— A Rand Corporation study says the amount people would have to pay in taxes under the disparate national health insurance (NHI) proposals before Congress wouldn't vary much and suggested this opens the door to compromise.

The report said that the Administration's CHIP approach in its 1975 NHI bill provides a "surprisingly small" saving to middle and upper income taxpayers over the 1975 compromise Kennedy-Mills plan, although both provide essentially the same services.

The old Nixon Administration bill and the defunct Kennedy-Mills bill each would require total tax revenues of some $45 billion to fund the health care of people under 65. The Rand team said the labor-supported Kennedy-Corman proposal would require $68 billion, and the Long-Ribicoff bill, $16 billion.

Financed by payroll and income taxes but requiring no payments to hospitals or doctors by patients, the Kennedy-Corman bill, despite its higher cost, would impose virtually the same total cost for health care on families earning under $15,000 as the Administration and Kennedy-Mills bills, the report said.

But to raise the extra $23 billion it would cost, the Kennedy-Corman bill would impose sharply increased taxed on upper income families—as much as $1,000 a year more than under the Administration and Kennedy-Mills bills for a $40,000-a-year family.

***

No Endorsement—The Teamsters has backed away from support for the Kennedy-Corman bill to federalize national health care.

A high Teamsters official told a national health conference that "we have become increasingly distressed...by the possibility that a National Health Insurance plan which runs all of the money for the purchase of health care through the federal government, such as the Health Security Act (Kennedy-Corman), might be adopted...we cannot support a program that gives the federal government total control over financing and delivery of health care."

Hitherto, organized labor had presented what appeared to be a united block in favor of the Kennedy bill which would eliminate private health insurance and have the government finance all health care. The Teamsters had not been in the forefront of the labor push, but they had not opposed it.

***

A top Food and Drug Administration official has warned that the integrity of the medical profession is threatened by the growing influence of drug companies on medical education and medical publications.

Bureau of Drugs Director Richard Crout, MD, told a Senate committee that "educational materials produced by and for an industry with an interest in increasing sales of drugs will—on balance—be biased in a direction intended to promote drug use."

Dr. Crout said he considers only the *New England Journal of Medicine* and the *Journal of the American Medical Association* to be "scholarly" publications. In the 26 other medical magazines, the content tends to be "overwhelmingly optimistic about drug therapy...the issue is not whether the article is scientifically correct or whether it is proper to publish such information...(but) whether such an article presents...in the guise of a scientific paper, promotional information which otherwise could not be legally published as drug advertising or drug labelling."

Court was also critical of pharmaceutical companies' funding of continuing post education for physicians.

The FDA will try to establish a clear definition of the role of audio-visual and printed materials funded by the pharmaceutical companies in post-graduate medical education, Dr. Crout told the Senate Monopoly Subcommittee headed by Sen. Gaylord Nelson (D-Wis.). ■

AMA Attack Reports On Unnecessary Surgery

The AMA has called for a re-opening of hearings by a Congressional Subcommittee on the subject of alleged unnecessary surgery.

The call for new hearings was made in a letter to Rep. John E. Moss (D. Cal.) from James H. Sammons, M.D., executive vice president of the AMA. Rep. Moss is chairman of the Subcommittee on Oversight and Investigations of the Committee on Interstate and Foreign Commerce of the House of Representatives.

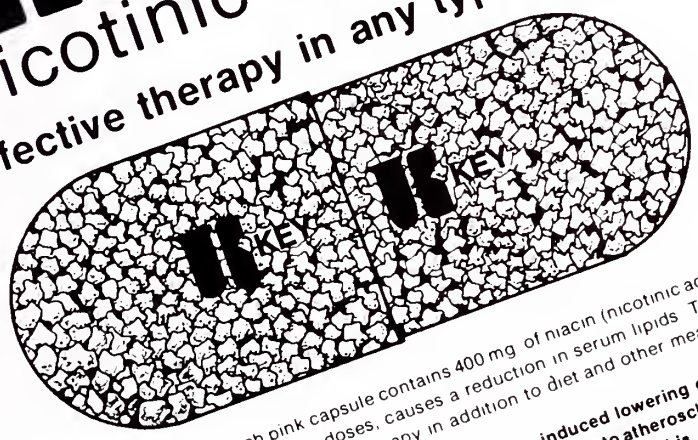
The AMA charged that the Subcommittee staff had been informed three months before the report was issued that its figures on surgery rates among Medicaid patients were grossly inflated, yet the figures were published in the report. ■

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Luther Leonidas Hill, Jr., M.D.

"I care not what a man's mental endowments are nor what his professional attainments may be, but unless he is true to his ideals and has the approval, the sympathy of his fellows, his life is a failure, for the dominant and triumphant tone of life is love."

Luther Leonidas Hill, Jr., M.D.

LUTHER LEONIDAS HILL, JR., was born near Montgomery, Alabama, on January 22, 1862, the son of the Reverend Luther Leonidas Hill, Methodist minister, and Laura Sarah Croom Hill, of Greensboro, Alabama. Dr. Hill's grandfather, William W. Hill, who was also a Methodist minister, moved from Warrenton, North Carolina, to Greensboro in 1829. His original ancestor, William W. Hill, emigrated from England to North Carolina in 1687.

After receiving tutoring by his father, Luther, Jr., entered a private school in Montgomery in 1875 and then, at the age of 16, he became a student at Howard College, located then at Marion, Alabama.

Young Hill was preparing for the ministry at Howard College and, had it not been for a rabbit and an old maid, would have followed in the footsteps of his father and grandfather. In the summer of 1880, while visiting with young friends in Marengo County, he was coaxed by one of the friends to shoot a rabbit which had crossed their path. Young Hill did fire at the rabbit and, although he did not hit it, a maiden lady had him arrested for carrying a concealed weapon and shooting on Sunday. His case was to come before the next grand jury. The incident would have been a great embarrassment to both Hill and his family, particularly damaging to the career of a budding ministerial student. To avoid the embarrassment and to prevent his father from learning of the particulars, he obtained his father's consent to change professions and to enter the study of medicine.

HE TRAVELED to New York City where he enrolled in the Medical Department of the University of the City of New York (later named New York University) in the fall of 1880, and his preceptor was Dr. W. J. Holt. He graduated with his M.D. degree on March 10, 1881, at the ripe age of 19. The following year he was graduated from the Jefferson Medical College in Philadelphia, after which he spent a year at Wyeth's New York Polyclinic School. Then, he studied for several months under Sir Joseph Lister at the King's College Hospital in London.

Following his graduation in New York, he was admitted to the practice of medicine in Alabama. In that same year, 1881, Dr. John B. Roberts, of Philadelphia, predicted that the human heart would be sutured and Billroth, the great Viennese surgeon, replied, "Any man who attempts it will lose the respect of the profession."

Though Dr. Hill had never seen an abdominal operation until he performed one himself and although he was conversant with Billroth's statement, he went to work to study wounds of the heart and its possible suture. In 1900 he wrote an article published in **The Medical Record** on "Wounds of the Heart with a Report of Seventeen Cases of Heart Suture."

In 1902 came the opportunity for which he had been eagerly awaiting and for which he would become world renowned. It was not just an accident that Dr. Hill was called into consultation to treat a 13-year-old Negro youth who had been stabbed. He had been making a study of wounds of the heart and on the evening of September 14, 1902, the man and the hour met. The following description of the operation is taken from Dr. Hill's personal account as reprinted from **The Medical Record:**

"Henry Myrick, negro, thirteen years of age, of rather delicate appearance, was stabbed at five o'clock Sunday afternoon, September 14, 1902. About six hours after the injury Drs. Parker and Wilkerson were called, and, perceiving the nature of the case, advised that I should be sent for, and upon my arrival I urged an immediate operation. To this the parents readily consented, and I was assisted in the operation by Drs. Wilkerson, Parker, Michel, R. S. Hill, Robinson, and Washington.

The knife blade entered the fifth intercostal space about a quarter of an inch to the right of the left nipple, and penetrating the apex of the heart passed into the left ventricle. The wound was about three-eights of an inch in length, and from it came a stream of blood at every systole.

There was no external bleeding, but his general condition was very unfavorable. The radial pulse was almost imperceptible, and the heart sounds were heard with difficulty. There was a triangular-shaped area of dullness. He had dyspnoea, and was very restless. His extremities were cold, as were his lips and nose. When aroused, he answered questions intelligently, though his countenance showed great distress.

Securing two lamps, I removed the boy from his

bed to a table, at one o'clock at night, eight hours after the stabbing, and proceeded to cleanse the field of the operation, and place the patient in as favorable a condition as my surroundings in the negro cabin would allow.

Commencing an incision about five-eighths of an inch from the left border of the sternum, I carried it along the third rib for four inches. A second incision was started at the same distance from the sternum and carried along the sixth rib for four inches. A vertical incision along the anterior axillary line was made, connecting them. The third, fourth, and fifth ribs were cut through the pleura. The musculo-osseous flap was raised, with the cartilages of the ribs acting as the hinges. There was no blood in the pleural cavity, but the pericardium was enormously distended. I enlarged the opening in the pericardium to a distance of two and one-half inches, and evacuated about ten ounces of blood.

The pulse immediately improved, and was commented upon by Dr. L. D. Robinson, who so successfully and skillfully administered the chloroform. I had my brother, Dr. R. S. Hill, to pass his hand into the pericardial sac and bring the heart upward, and, at the same time, steady it sufficiently for me to pass a catgut suture through the center of the wound in the heart and control the hemorrhage.

I cleansed the pericardial sac with a saline solution, and closed the opening in it with seven interrupted catgut sutures. The pleural cavity was also cleansed with a saline solution, and drained with iodoform gauze. The musculoosseous flap was brought down and stitched in position. The operation lasted forty-five minutes. The patient's pulse on reaching his bed was 145 and respiration 56. I injected strychnine hypodermically, and employed hypodermoclysis and autotransfusion.

The following morning, September 15, the boy's pulse was 130 and temperature 102, and he was slightly delirious. On September 16 there was but slight change in the temperature and pulse, though the delirium was much worse. On September 17 he commenced to improve, and his recovery has been uninterrupted. I allowed him to sit up on the fifteenth day.

Dr. E. C. Parker, who assisted me in the subsequent management of the case, examined the urine frequently, but was only able to find once a trace of albumin."

More than one quarter of a century later, Dr. Hill, then 77 years of age, was in his Montgomery office when a Negro of about 40 was admitted. The Negro asked him if he recognized him. Dr. Hill searched his memory, trying to place the caller among the vast number of people he had known and treated, but he could not. Then the Negro removed his shirt revealing a scar in the heart region. Dr. Hill recognized that scar as his own handiwork. His visitor was Henry Myrick. He told Dr. Hill he was living in Chicago and that he was enjoying perfect health.

Though ironic and strangely coincidental, Henry Myrick died in 1942 from another stab wound in almost the exact spot in the heart where he was injured in Montgomery 40 years earlier.

In 1887, Dr. Hill became a dues-paying member of the Medical Association of the State of Alabama. He was elected Junior Counsellor in 1889, Senior Counsellor in 1894, Grand Senior Counsellor in 1898 and Life Counsellor in 1908.

On April 23, 1897, at the Selma meeting of the Association, Dr. Hill was elected president. During his presidency, he instituted the custom of giving the annual Jerome Cochran Lecture in honor of the distinguished pioneer Health Officer of the State of Alabama. In 1913, Dr. Hill was honored by being requested to deliver the annual lecture and his subject was "Surgical Complications and Sequels of Typhoid Fever." From 1916 to 1918, he served as an official Delegate from the Association to the AMA.

LIKE OTHERS who have contributed brilliant and outstanding works for the good of mankind, notably Thomas A. Edison and Beethoven, Dr. Hill was a victim of deafness. First recognized while he was a student, his deafness due to otosclerosis became worse as he grew older. For some time before his death, it was so serious that ordinary conversation with Dr. Hill was extremely difficult.

His income usually varied between twelve and sixteen thousand dollars per year. As he grew older, he was very happy that he had not charged excessive fees. His largest fee was $1,200 and in the late years of his life, he spoke of it with the greatest of humility.

That Dr. Hill was a well trained physician and surgeon is evidenced by the variety of papers which he published in leading medical and surgical journals. In addition to heart wounds and biography, he wrote on many subjects which included hernia, stone and bladder, appendix, retention of the testicles, elephantiasis, smallpox and cancer of the breast.

In 1912, the University of Alabama, in recognition of Dr. Hill's achievements as a surgeon, conferred upon him the degree Doctor of Laws. In 1913, he was elected a fellow of the American College of Surgeons and in 1925, he was awarded honorary membership in Phi Beta Kappa at the University of Alabama.

He was elected president of the Montgomery County Board of Health in 1893. He served two terms—from 1896 to 1899 and from 1902 to 1904—as a member of the Pension Office's Board of

Examining Surgeons representing Montgomery County. In 1911, Governor Emmett O'Neal named him to the Board of Trustees of the Alabama School for The Deaf and The Blind.

ON JULY 12, 1888, Dr. Hill married Miss Lillie Lyons, of Mobile. They were the parents of five children: Luther Leonidas Hill, III, who died in infancy; Mrs. Lillian Hill Rucker, the wife of the late Dr. E. W. Rucker, ear, nose and throat specialist of Birmingham; The Honorable Lister Hill, former United States Senator; Mrs. Amelie Hill Laslie, the wife of the late Dr. C. G. Laslie, of Montgomery; and Luther Lyons Hill, retired Brigadier General.

After a long and fruitful career, Dr. Hill passed away quietly on April 4, 1946, at the age of 84.

On October 18, 1959, the University of Alabama Medical Center dedicated its new cardiovascular surgical unit to the memory of the pioneer heart surgeon. Today, the L. L. Hill Heart Center is widely known throughout the world as a leader in the fields of heart research and surgery. ■

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about the cover...

33 Perry Street is a Montgomery landmark that will long be remembered as the medical building from which Drs. J. Marion Sims and L. L. Hill practiced. The JOURNAL extends its thanks to artist Alice Hyde of the Alabama Department of Public Health, who provided the artistic scene for the cover and Dr. L. L. Hill, former U. S. Senator Lister Hill and Mrs. C. G. Laslie, all of Montgomery, and Mrs. Ed Rucker, of Birmingham, for their assistance in preparing this material about the late Dr. L. L. Hill.

HIGHLIGHTS OF AMERICAN MEDICINE

American Doctors Lead Victory Over Yellow Fever

WITHIN the lifetime of some Americans still living today yellow fever was a feared and dreaded disease that swept American cities from time to time, striking tens of thousands and taking many lives.

Yellow fever likely was brought to the Americas in the 16th century from the Old World. In America it became a feared scourge and New World doctors were the first to study the disease.

Dr. John Crawford of Baltimore is credited by medical historians as first determining that mosquitoes were the source of malaria, yellow fever and other diseases. Dr. Crawford clashed vigorously with the famed Dr. Benjamin Rush, a signer of the Declaration of Independence, who believe that yellow fever was caused by something foul in the air.

Dr. Carlos Juan Finlay of Cuba, in experiments in the 1880s, tested the theory that the Aedes Aegypti mosquito was the transmitter of yellow fever. Taking off from Dr. Finlay's inconclusive work, a U.S. Army Medical team led by Dr. Walter Reed in 1901 showed once and for all that the mosquito was the culprit in a medical experiment that was the theme of a famous Broadway play of a generation ago, "Yellow Jack."

IT FELL to William Crawford Gorgas of the Army Medical Corps to demonstrate that he could stop yellow fever in Havana by eradication of the mosquito from the swamps and waterways of the Cuban capital. Gen. Gorgas repeated his success in Panama, making possible the digging of the Panama Canal by laborers freed from the hazard of the serious disease.

Gen. Gorgas later headed the Rockefeller Foundation Yellow Fever Commission that wiped out the disease in many Latin American countries and later worked on the problem in Africa. And in the late 1930s a researcher at the Rockefeller Foundation Laboratories perfected a vaccine against yellow fever.

The last epidemic in the United States was in New Orleans in 1905, causing more than 400 deaths and almost 3,500 cases. New Orleans had neglected to carry out a mosquito education campaign, but after the epidemic moved to eliminate the breeding areas.

Ironically, at an international medical meeting some years ago the Republic of Panama pointed out that the Aedes Aegypti mosquito still flourished in some Southern states of the United States, and that all that was needed for another outbreak was for an infected individual to come into a southern airport from abroad and be bitten by a mosquito. An eradication campaign was ordered. ■

Prepared by the AMA

A View Of Nineteenth Century Therapeutics

By RONALD D. GREENWOOD, M.D.*

Medical and surgical therapeutics have progressed at a remarkable pace within the twentieth century. Examples of therapeutics of the nineteenth century abound in the publications of the day. Some interesting examples which allow us a view of practice nearly a century ago follow. Although some of these were methods not in universal use, they were not unusual in relation to other modes of therapy.

Dr. F. A. Ramsey, a practitioner in Knoxville, Tennessee, reported methods of treatment for diarrhea (The East Tenn. Record of Med. Surg. 1:32-3, 1852):

"During the strawberry season of the year 1850, I had ...children...affected with diarrhea (from strawberries). Calomel oil and french brandy relieved in some four days. In the other cases, the children were all teething and were relieved by lancing the gums freely, and a few doses of Hydg. C. Cret. I cannot see why any practitioner can object to lancing gums in any affection occurring with children during the process of teething."

Dr. C. W. P. Brock of Richmond, Virginia wrote in 1878: (South, Clin. 1:368-9, 1878) a treatment for the albuminura of scarlet fever:

"During the epidemic of scarlet fever which has been prevailing for a year in this city...I have been giving my patients Buffalo Lithia Water ad libitum, and the exclusion of all other water for drinking purposes. In no case since I have pursued this course have I seen even a trace of albumen in the urine of scarlatinal patients."

This water was recommended by others for female diseases (Dr. J. B. McCaw, a professor in the Virginia Medical College), for dropsical effusion after scarlet fever (Dr. C. A. Bryce of Richmond, and Dr. T. J. Williamson of Cincinnati, Ohio.). The water sold for five dollars for one dozen half gallon bottles.

Dr. John S. Erwin of Buncombe County, North Carolina made observations on the treatment of scarlatina during the epidemic of 1842. He suggested a prophylaxis for the disease (So. J. Med. Phar. 1:41-54, 1846):

"However futile and insignificant blind prejudice may yet consider Belladonna as a prophylactic in Scarlatina, the mass of evidence will ere long be so satisfactory and overwhelming, that, the physician who shall refuse to use this preventative, will be held as culpable as he who would refuse to vaccinate at the present day."

Ice was suggested for treatment for croup in 1879 by Dr. J. N. Norris of Birmingham, Iowa (South. Pract. 1: 105, 1879):

"Let the little patient's chest be protected by two or three folds of flannel, and let a bladder partially filled with coarsley pounded ice be applied in front of the neck, and retained there closely, and as soon as the ice in the bladder becomes melted, or nearly so, let it immediately be replaced by another... The ice should be unremittingly applied till the last vestige of the peculiar metallic or brassy sound is no more to be heard in the cough."

In 1853, Dr. W. P. Jones of Nashville, Tennessee, suggested for infantile asphyxia (So. J. Med. Phy. Sci.: 1:8, 1853):

"...a foetus was expelled....without any other vital indication than bodily warmth... .

The ordinary means, such as stimulating baths, inflating the lungs, friction...were used probably a half hour or more, without any apparent beneficial effect. At this crisis, the father entered...the room, bearing upon his breath the odor of alcohol. I told him to come and apply his lips to those of the child, and gently blow into its mouth. ... He did so. He inflated the lungs and I expelled the air repeatedly; and together at length we succeeded in resuscitating the child, which I am constrained to regard as wholly attributable to the stimulus of alcoholic inspiration. It is at any rate worthy of a trial, after the ordinary means have failed ... we suggest that the accoucher inhale the vapor of alcohol, or spirits of camphor, immediately previous to inflating the lungs of the child."

Dr. S. F. Starley of Fairfield, Texas, was a frequent contributor to the literature especially in obstetrics. He describes the treatment of puerperal convulsions in an 18-year old primipara on Dec. 24, 1859 (South. J. Med. Sci. 1:636-7, 1866):

"I...found her in convulsions, the fits occurring every fifteen or twenty minutes, and deep coma existing between the convulsive seizures. I at once commenced the administration of chloroform by inhalation, and had the bowels cleared by enemas containing spirits of turpentine. Hot applications were made to feet and legs; blister to nucha, and twenty grains of calomel was mixed with a little thin syrup and put into her mouth... . Bloodletting was not practiced...because the patient was already anemic and of delicate constitution. The main reliance after delivery was upon mercurial cathartics, followed by injections of laudanum and turpentine in starch water, into the rectum."

These descriptions are but a few of those on record from a time when American medical practice was highly individualized and in its infancy. ■

*Children's Hospital Medical Center, 300 Longwood Ave., Boston, Mass. 02115.

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Bacterial Meningitis In The Pediatric Age

Raymond K. Lyrene, M.D. and Ralph E. Tiller, M.D.*

THE antibiotic era has brought about a dramatic reversal in the outcome of bacterial meningitis. Prior to the use of specific antimicrobial therapy the prognosis was uniformly fatal or disastrous; but since its introduction there has been a gratifying decrease in morbidity and mortality.[1] Physicians developed the attitude that bacterial meningitis would soon be a disease of the past. Experience has proven them wrong, for in many instances there continues to be an unacceptable outcome.

EPIDEMIOLOGY

The true incidence of bacterial meningitis is difficult to determine accurately because of inadequate reporting. The Center for Disease Control estimates that in the United States there are 29,000 cases of *H. influenzae* meningitis, 4,800 cases of pneumococcal meningitis, and 4,600 cases of meningococcal meningitis per year.[2] Children at greatest risk for developing bacterial meningitis are those less than one year of age.[3] Ninety per cent of cases occur between one month and five years of age.[4,5] In 1973, in all age groups there were 1,523 deaths from meningitis (excluding meningococcal and tuberculous meningitis).

NEONATAL MENINGITIS

Neonatal meningitis deserves separate consideration, because the morbidity and mortality is unequaled in any other pediatric age group, the offending bacteria are more commonly gram negative, and the clinical manifestations are often different than those occuring in older infants and children. The results of a study of neonatal meningitis from the National Collaborative Perinatal Research Study identified an incidence of 0.46 per 1,000 livebirths.[7] Groover et al[8] reported an incidence of 0.4 per 1,000 live births. In virtually all reported series of meningitis in this age group, the mortality has ranged from 50-90%.[9] Morbidity is equally staggering.

A wide variety of organisms may cause neonatal meningitis.[10,11] (See Table 1.) Gram negative enteric organisms account for the majority of infections and *Escherichia coli* is the most common causative organism in this group.

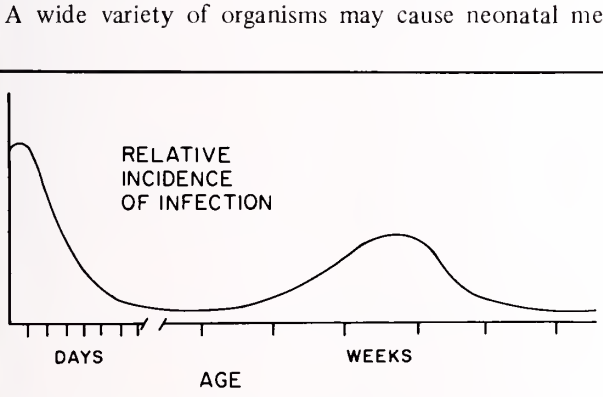


Figure I. Natural History of Group B β-Hemolytic Streptococcus and Listeria Monocytogenes

TABLE 1. CAUSES OF BACTERIAL MENINGITIS IN THE NEONATAL PERIOD	
COMMON	LESS COMMON
E. Coli	Paracolon species
Group B streptococcus	Proteus species
Staphylococcus	Pseudomonas
	Klebsiella-aerobacter
	Salmonella
	Diplococcus pneumoniae
	Hemophilus influenzae
	Listeria monocytogenes
	Neisseria meningitidis

Robbins et al[11] reported an association between the K1 capsular polysaccharide of *E. coli* and meningitis caused by this organism, an association which was not observed for *E. coli* isolates from the blood of neonates or adults without meningitis or isolates from urinary tract disease. Immunochemically this antigen is identical or similar to the meningococcal group B capsular polysaccharide. This association suggests that the invasive properties of these organisms may be related to the K1 antigen.

The emergence of the group B beta-hemolytic streptococcus as a frequent pathogen deserves special emphasis. It shares a number of similarities with *Listeria monocytogenes* including epidemiology, pathogenicity and clinical features of perinatal infection caused by these two gram positive organisms.[12] Two distinct clinical entities are apparent, an early septicemic form and a delayed meningitic form. (See Figure 1) The early onset form occurs within the first 24 hours of life. Symptoms of severe respiratory distress and shock associated with septicemia are usually present. Apnea is common.[13] The clinical and radiographic finding may be confused with respiratory distress syndrome of the newborn.[14] Mortality is high.

The late onset type usually occurs between one and twelve weeks of age, is less fulminant, has a more characteristic meningitic appearance and has a lower morbidity and mortality. The early onset disease is acquired in utero or at delivery, and the organisms can be cultured from many sites including blood, nasopharynx, skin and meconium. A history of obstetrical complications including prolonged rupture of the membranes is frequent. In the late onset type, pathogens are usually acquired post partum.[15-17]

*Department of Pediatrics, School of Medicine, The University of Alabama in Birmingham, and the Children's Hospital, Birmingham, Alabama.

TABLE 2. CAUSES OF BACTERIAL MENINGITIS IN INFANCY AND CHILDHOOD

COMMON	LESS COMMON
Hemophilus influenzae	Mycobacterium tuberculosis
Diplococcus pneumoniae	Staphylococcus
Neisseria meningitidis	Proteus mirabilis
	Pseudomonas aeruginosa
	Hemophilus parainfluenzae
	Herellea vaginicola
	Serratia marcescens
	Neisseria species

MENINGITIS OF LATER INFANCY AND CHILDHOOD

Hemophilus influenzae, Diplococcus pneumoniae and *Neisseria meningitidis* are responsible for most cases of meningitis occurring in later infancy and childhood though a variety of other organisms may be involved.[18] (See Table 2)

The incidence of penumococcal meningitis has remained unchanged in recent years. Blacks are at greater risk of developing this type of meningitis. This predisposition is independent of income, population density or crowding.[5] Pneumococcal meningitis tends to be associated with an obvious suppurative focus, an underlying systemic disorder or a structural defect permitting communication of the subarachnoid space with the exterior.[18] Children with sickle cell disease are at particular risk. The mortality for this disease is to a certain degree age related. In a study of pneumococcal meningitis by Weiss et al[19] the mortality in infants less than one year of age was 21% and in those 1-29 was 17%. Thereafter the fatality rate became progressively higher with increasing age.

Meningococcal groups B and C are the common causes of meningococcal meningitis in the United States with a carriage rate of 1-10% of the general population.[3] Carriers tend to be over 21 years of age, harbor the organism for many months and display slow spread among family members. Currently in the civilian population meningococcal meningitis is a disease of young children exposed to chronic adult carriers.[3] Sulfonamide resistant strains of this organism have been noted since 1943 and are now predominant in the United States.[20] As reported by Bennett and Young, the resistance of group C is 92%, group A-72% and group B-41%.[21]

H. influenzae is the most common cause of bacterial meningitis in the child less than 6 years of age. Type B is responsible for almost all cases, and the disease has become more common in recent years.[22,23]

DIAGNOSIS

In almost no other disease are we as dependent on the laboratory for prompt diagnosis as in the case of bacterial meningitis. One of the essentials for improved outcome is early diagnosis and treatment, and it is in the neonate and young infant that this is most often delayed. Presenting signs may be entirely nonspecific. Even in older children such classic signs as neck stiffness and altered sensorium may be absent.

Examination of the cerebrospinal fluid is mandatory. The risk benefit factor is extremely low, and most complications are related to the use of unstyletted needles.[24] Routine studies include cell count and differential, glucose, protein and microscopic examination. The cell count in bacterial meningitis may range from 10 to 100,000/mm^3 and usually exceeds 1,000 and in viral meningitis ranges from 15 to 2,000/mm^3. The majority of cells in bacterial meningitis are polymorphonuclear leukocytes.

The spectrum of findings in viral meningitis may overlap those found in bacterial in numbers and type of cells. Especially early in the course of viral meningitis, there may be a predominance of polys.[3] The total protein content of the CSF is elevated above 100 mg% in nearly 90% of the cases of bacterial meningitis[26] and reflects a disruption of the blood brain barrier.[3]

The glucose level is frequently below 40 mg% and, indeed, may be quite low. A normal value does not rule out the presence of bacterial disease. Gram and methylene blue stains should be done routinely on any spinal fluid with pleocytosis. Methylene blue has the advantage of revealing bacteria more readily and is a better morphologic stain. It has the disadvantage of not distinguishing between gram positive or negative organism. Both are superior to either alone.

The organism density may be so low that bacteria may not be seen on routine smears. Centrifugation has been used in an effort to concentrate the organisms. This is not recommended for general use since concentration of organisms is not accomplished by the routine laboratory centrifuge without prolonged centrifuging.

For cases in which the clinical appearance and CSF characteristics are compatible with aseptic meningitis and in which there has been no prior antibiotic therapy, repeat lumbar puncture within 8-12 hours will help differentiate between viral and bacterial disease. A characteristic shift in CSF cellular morphology to predominantly mononuclear cells occur in most cases.[27]

A particular problem is the patient with partially treated meningitis; that is, the patient who has received prior antibiotic therapy who presents with CSF pleocytosis and the clinical picture of bacterial meningitis. Nearly 50% of patients receive one or more antibiotics before diagnostic lumbar puncture is performed.[28] Several recent studies indicate that this presents less of a diagnostic problem than previously though.[29,30]

Ordinary oral doses of antibiotics may occasionally alter certain measurements of the CSF in patients with bacterial meningitis, but it would be rare for all meansurements to be altered simultaneously. This statement, though, does not apply to the potential of pretreatment to alter the results of CSF culture and gram stain. Antecedent therapy will result in a decrease in CSF culture and gram stain positivity rates of 25% and 15% respectively.[31] This is less likely to be the case with *H. influenzae* meningitis than in meningitis caused by *N. meningitidis* or *D. pneumoniae*. This difference is related mostly to differences in sensitivity of these organisms to commonly used antibiotics.

Attempts to clarify ambigous findings as well as attempts to make more prompt diagnoses have led to the development of a number of ancillary tests. (See Table 3) The NBT test is a measurement of the ability of phagocytes to reduce

nitroblue tetrazolium. Increased reduction is expected in bacterial but not viral illnesses.[32] Measurement of CSF immunoglobulins has demonstrated a significant increase in IgM in patients with bacterial meningitis as compared to those with viral disease;[33] but CSF IgM is also raised in non-infective inflammatory disease of the CNS.[34]

Immunofluorescence is used to detect the presence of bacterial antigen.[35,36] CSF pH is low and lactate levels are high in bacterial meningitis.[37,38] Technical difficulties, lack of sensitivity and in some cases lack of specificity have prevented the widespread application of these tests.

Feldman[39] showed that the number of meningitis cases of unknown cause that could be classified as probably bacterial or viral was increased by the determination of the level of CSF LDH activity which was usually elevated in bacterial meningitis but not in viral. SGOT determination may be useful in predicting which patients will develop complications. Belsey[40] showed that a level of less than 24 units was associated with an uncomplicated clinical course in the majority of patients but that a level of 24 units or more was associated with complications in a high percentage of patients.

The limulus lysate test detects the presence of endotoxin and involves the use of a lysate of phagocytic cells derived from the horseshoe crab. A gel is formed in the presence of endotoxin thereby allowing nonspecific detection of gram negative organisms.[41,42]

The most promising technique for rapid diagnosis is countercurrent immunoelectrophoresis.[43-46] Specific antisera against the common pathogens (i.e. H. influenzae, pneumococcus and meningococcus) are matched in the electrophoretic setup against the spinal fluid. For *H. influenzae* the false negative rate is approximately 10%, and false positives are rare.[31] The detection of pneumococcus or meningococcus has not been as successful.

THERAPY

Since December, 1973 there have been reports of strains of *H. influenzae* highly resistant in vitro to ampicillin. As of June, 1975 a total of 23 states and the District of Columbia have reported resistant pathogenic isolates of *H. influenzae.* The incidence of resistance is unknown, but the Center for Disease Control now recommends the inclusion of chloramphenicol in the initial therapy for patients with confirmed or suspected serious infection with this organism. When accurate sensitivity studies are available, chloramphenicol may be discontinued if the organism is ampicillin sensitive. The CDC has published bacteriologic guidelines for performing sensitivity tests.[48]

Prompt initiation of antibiotic therapy is of utmost importance. An appropriate initial therapy for infants and older children is the administration of penicillin G or ampicillin and chloramphenicol. The antibiotic regimen should be re-evaluated when the results of the bacterial isolation studies and antimicrobial sensitivity tests are available. Therapy should be continued with the single most appropriate agent.[47] (See Table 4) Medication should be given *intravenously* in 4-6 divided doses daily. Intravenous administration should be continued for the entire treatment period. Therapy is usually continued for 10-14 days. Pneumococcal meningitis is treated for at least 14 days.[18]

TABLE 3. ANCILLARY STUDIES IN MENINGITIS

NBT reduction
CSF immunoglobulins
Immunoflourescence
CSF pH and Lactate
CSF enzymes
1. LDH
2. SGOT
Limulus lysate
Counterimmunoelectrophoresis (CIE)

If the clinical response is favorable, repeated lumbar punctures are probably not necessary during the course of therapy. A usual practice is to repear the lumbar puncture 48 hours after the cessation of antibiotic therapy to look for recrudescence.

Recently there has been considerable controversy over the drugs of choice for neonatal meningitis. Traditional recommendations included a combination of ampicillin and gentamicin or a semisynthetic penicillin (methicillin or nafcillin) and gentamicin. Chang et al[49] cited the poor permeability of the CNS to the aminoglycosides as the major objection to their use. Even intrathecal instillation of drug has not always been associated with a bacteriologic or clinical response.[50-52] A reappraisal of the role of chloramphenicol was urged.[49] The data presented by Chang raises important issues in the antibiotic treatment of neonatal meningitis which need further clarification and confirmation.

Certainly antibiotic therapy should be individually tailored according to sensitivity studies and clinical response; but at this time it would be premature to suggest specific changes. Should ventriculitis be a complicating feature of the disease intraventricular administration of gentamicin should strongly be considered by those experienced in its use. If there is reason to use chloramphenicol, dosages (Table 4) should be strictly adhered to and toxicity monitored closely. Serum chloramphenicol levels should be followed if possible.

SUPPORTIVE THERAPY

The goal of supportive therapy is to maintain the child's homeostasis during the crisis period. Care must be taken to ensure adequate function of the cardiopulmonary systems and, subsequently, adequate tissue oxygenation. Fluid administration should usually be restricted to *low maintenance* levels for the first few days of treatment in an effort to minimize such complications as cerebral edema and the inappropriate ADH syndrome. Other metabolic alterations such as hypoglycemia and hypocalcemia occur especially in the newborn. Dexamethasone, mannitol or glycerol may be used in the management of cerebral edema.

Seizures occur in up to 30% of cases of meningitis and are most common in meningitis due to *H influenzae.*[3] General measures such as prevention of hypoxia and aspiration and maintenance of airway are important. Anticonvulsants may be required. Such focal complications

TABLE 4. ANTIBIOTIC DOSAGES FOR BACTERIAL MENINGITIS

	Neonates	Infants and Children
Aq penicillin	50,000-100,000 kg/24 hrs, IV (q4h)*	250,000-500,000 kg/24 hrs, IV (q4h)
Ampicillin	150-200 mg/kg/24 hrs, IV (q6h)	200-400 mg/kg/24 hrs, IV (q6h)
Nafcillin	100-200 mg/kg/24 hrs, IV (q6h)	200 mg/kg/24 hrs, IV (q6h)
Methicillin	100-200 mg/kg, 24 hrs, IV (q6h)	400 mg/kg/24 hrs, IV (q4-6h)
Gentamicin	5 - 7.5 mg/kg/24 hrs, IM/IV (q8h)	5 - 7.5 mg/kg/24 hrs, IM/IV (q8h)
Kanamycin	15 mg/kg/24 hrs, IV/IV (q12h)	15 mg/kg/24 hrs, IM/IV (q12h)
Chloramphenicol	preterm 25 mg/kg/24 hrs, IV (q64) term - 50 mg/kg/24 hrs.	–1 month 100 mg/kg/24 hrs, IV (q6h)

*Indicates division of dosage

as subdural effusion, subdural empyema and abscess must be recognized and treated appropriately.

PREVENTION

The evolution of early onset group B streptococcal disease may be so rapid that death may ensue despite the administration of appropriate antibiotics within hours of birth. Because of this, the ultimate objective must be prevention of the disease.[53] Eradication of the carrier state in pregnant females has been suggested.[17] But as of yet there are no controlled studies showing that antibiotic prophylaxis of pregnant females at term will prevent serious neonatal infection or that administration of penicillin early will eradicate the carrier state for the duration of pregnancy.[53]

The estimated likelihood of severe meningococcal disease in family contacts is about 1%[54] and chemoprophylaxis of close family contacts has long been used. With the advent of sulfonamide resistance rifampin or minocycline have been advocated as prophylactic agents.[55] Trials of group C meningococcal vaccine in military recruits have been very encouraging.[56]

LATE COMPLICATIONS

Long term sequelae continue to be significant even with adequate antimicrobial therapy. Morbidity following neonatal meningitis continues to be the most striking. Of 125 survivors from 12 series, 36% had severe neurologic impairment.[10] Overall[7] reported sequelae in 50% of survivors.

Complications in patients beyond the neonatal age are also significant and may include mental retardation, hydrocephalus, convulsive states, paresis, ataxia, vestibular damage, deafness, psychosis, hyperactivity, poor impulse control, spastic hemiplegia, blindness and learning disorders. In a followup study of 86 patients with *H. influenzae* meningitis, 29% of survivors had severe or significant handicaps. Fourteen per cent had possible residuals, and 43% were free of detectable deficits.

A study comparing survivors who were considered to be normal with matched peers in the same classroom showed that post-meningitic children functioned at significantly lower levels than their nonmeningitic peers.[60] Sproles[61] reported similar results in a followup of 33 long term survivors of *H. influenzae* meningitis. Ten per cent had a hopeless prognosis, and 27.5% had definite handicaps of a wide variety.

CONCLUSIONS

Despite the advent of antibiotic therapy, bacterial meningitis continues to be a disease with significant morbidity and mortality. Early diagnosis and institution of appropriate therapy are essential. Prevention continues to be the goal.

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Acknowledgement

The authors are indebted to Mrs. Deborah Nuby for secretarial assistance in the preparation of this manuscript.

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Renal Cell Carcinoma (Hypernephroma): The Great Masquerader

David L. McCullough, M.D.* and
Ronald D. Harris, M.D.**

INTRODUCTION

Renal cell carcinoma, commonly called hypernephroma, has been a medical enigma due to its unusual and sometimes bizarre manifestations. The broad and varied spectrum of sign and symptoms which are manifested often do not bear any apparent relationship to the underlying origin. These signs and symptoms may not appear to be neoplastic in origin[16, 42, 43]. Between 30 and 45% of patients with this tumor have no symptoms directly referable to a primary renal lesion[6,24,30].

The peak incidence of renal cell carcinoma occurs in the 6th and 7th decades of life with a frequency in males twice that of females. Hypernephromas account for 3% of all solid cancers.

The classical triad of hematuria, pain and abdominal mass is present in only 10-15% of patients[11,14]. The correct diagnosis may be unnecessarily delayed or even missed because of the diffuse and varied symptoms which may be produced. These protean manifestations may be linked to other disease entities and further confuse the clinical evaluation.

Isolated metastases occur in about 2% of cases which may simulate primary tumors at the metastatic site[9,12,20,24]. In one series[16], 75% of the patients with bone lesions exhibited metastases before the primary renal tumor was recognized.

ROUTES OF METASTASIS AND CLINICAL MANIFESTATIONS

Distant metastases from renal carcinoma are most commonly found in the lungs, liver, lymph nodes and skeleton[1,16,24,43], while solitary metastases have been reported in virtually every organ. Included among the more exotic locations are the thyroid gland, nose, inner ear, orbit, larynx, tongue, breast, gallbladder and atrioventricular node of the heart[9,20,26,45]. These diverse anatomic sites of involvement may be explained by one or more metastatic routes.

Lympathic spread commonly involves lymph nodes in the renal pedicle, periaortic and pericaval areas. From these tumor cells may enter the thoracic duct and subsequently reach the pulmonary circulation. Cells may cross arteriovenous communications and bypass the capillary net in the lung or cross intracardiac shunts to gain access to the systemic circulation. Metastases to the hilar and paratracheal lymph nodes of the chest may mimic the appearance of sarcoid[22].

Direct tumor extension may involve the adrenal gland, diaphragm, or large bowel and involvement of the gastrointestinal mesentery is occasionally seen.

Direct venous invasion is occasionally observed. The mechanism is tumor extension into the renal vein and its tributaries. If the venous obstruction is complete, this may lead to nonvisualization of the kidney on excretory urography. Retrograde pyelography may be required to rule out an obstruction in the ureter or renal pelvis, although this is rare.

On the left side, the gonadal vein-renal vein junction may be obstructed causing a rapidly developing left-sided varicocele in males. Development of a right-sided varicocele suggests obstruction of the cava at the origin of the right spermatic vein. Retrograde growth down the gonadal vein may lead to metastases to the genitalia. This can produce priapism in extreme cases[44,45].

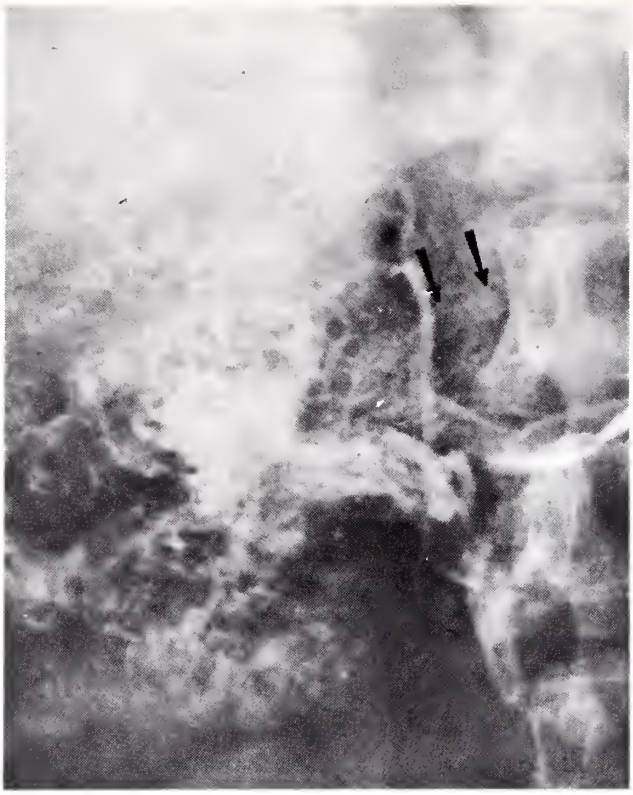
Tumor extension into the inferior vena cava via a renal vein may obstruct the outflow of the opposite renal vein with development of acute renal insufficiency resembling the nephrotic syndrome. Liver metastases may be secondary to shunts between the vena cava and portal circulation. The tumor may also grow from the vena cava into the hepatic veins.

Inferior vena cava obstruction with bilateral leg edema may be produced by tumor extension. This, in most cases, is produced by propagation of bland thrombus retrograde down the vena cava behind the tumor mass. Presence of tumor in the vena cava does not preclude successful operative management as has been shown by McCullough and associates[28]. The cava can be locally resected en bloc with the renal tumor [28] (Figure 1). Successful resection is precluded if tumor growth toward the heart has obstructed the hepatic veins and resulted in the production of Budd-Chiari syndrome, or if the tumor thrombus has progressed retrograde below the vena cava bifurcation.

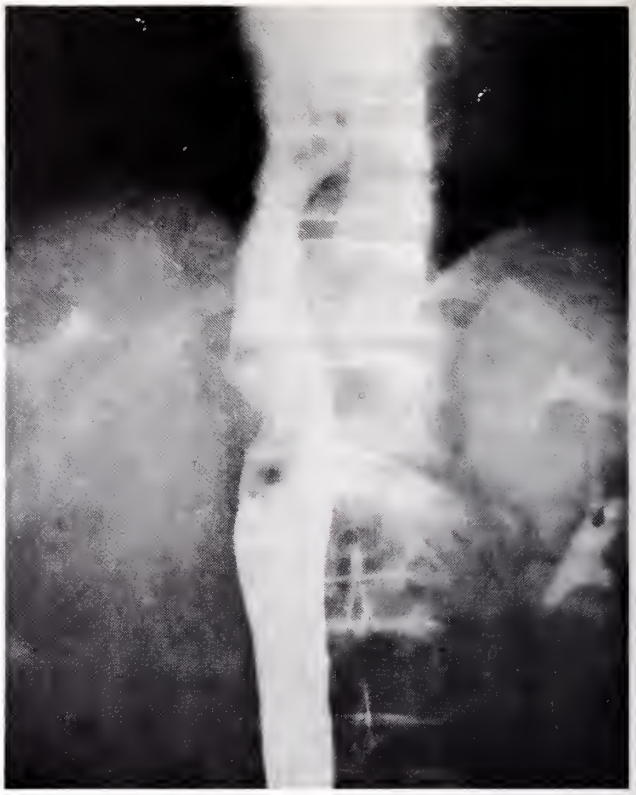
Tumor thrombus growth into the right atrium with obstruction of the superior vena cava has also been observed. This process may be confused with a primary bronchogenic tumor producing a superior vena caval syndrome. Symptoms suggestive of an atrial myxoma may be observed if the tumor thrombus is localized to the right atrium. Cases of tumor thrombus growing into the pulmonary artery have also been reported.[1].

Access to the axial skeleton, the head and neck, and the peripheral skeleton as far out as the elbows and knees, has been shown to occur via the paravertebral venous plexus of Batson[2-5,46]. This richly anastomotic group of valveless veins surrounds the dura of the spinal cord, vertebral bodies and their spinous processes. Batson's plexus extends cranial-

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1-A



1-B

FIGURE 2. SIMULTANEOUS INTRACRANIAL AND RENAL TUMOR

a) Brain tumor seen on angiography in patient with seizure disorder.

b) IVP film taken on patient just after 2a angiogram performed. Appearance of brain tumor prompted suspicion of renal tumor. Left renal tumor seen.

c) Renal arteriogram demonstrating vascular left renal tumor. All studies were done at same visit to radiology.



2-A



2-B



2-C

FIGURE 1. RIGHT RENAL CARCINOMA

a) Renal arteriogram shows profuse tumor vascularity in lower three-fourths of right kidney. Streaming tumor arteries (arrows) are present in the right renal vein and inferior vena cava.

b) Vena cavagram demonstrates tumor filling defect corresponding to streamer vessels in 1a. Renal excretion of constrast material has occurred despite renal vein obstruction. Such renal tumors can be managed by en bloc resection of the kidney and vena cava (28).

ly where it anastomoses with the venous sinuses of the skill and peripherally to the elbow and knee by way of communications with the vasa vasorum. These connections may account for the high incidence of ipsilateral metastases from renal tumors. These veins also have access to the azygous, hemiazygous, lumbar, and other systemic veins.

Occasionally, the histology of hypernephromas is composed of sheets of fibrous elements. When a solitary bony metastasis has this pathologic appearance, it is often mistaken for a primary fibrosarcoma of bone. If renal carcinoma is not considered in the differential diagnosis, a screening intravenous urogram may not be performed and inappropriate therapy may be instituted.

An interesting feature of renal cell carcinoma is its propensity to be hypervascular. This is seen in the majority of cases and is easily demonstrated on angiography. When this hypervascularity is noted in the primary tumor, its metastatic lesions are also hypervascular, and the angiographic appearance of the metastases is similar to the parent lesions. Because of their hypervascularity, metastatic lesions may be pulsatile and demonstrate a palpable thrill or bruit.

The hypervascularity of these tumors may also be misleading. An illustrative case is the patient with a seizure disorder who is evaluated by carotid angiography and is found to have a single hypervascular lesion which is mistakenly diagnosed as a glioblastoma multiforme. A single lesion in the neck or base of the skull may also be mistaken for a vascular nonchromaffin paraganglioma. Because of these confusing hypervascular lesions when carotid angiography is performed, a radiograph of the kidneys should be obtained before removing the angiographic catheter.

If a lesion is encountered on the urographic phase after contrast injection, a selective renal angiogram can be performed at the same sitting to search for a primary renal carcinoma. We recently cared for such a patient (Figure 2). Of course if multiple lesions are encountered initially, they are most likely metastases. The evaluation of such a patient is then directed toward finding the primary lesion.

Ultrasonography (echography) is also extremely helpful in making the diagnosis of a solid renal tumor versus a cyst and has saved many patients unnecessary renal explorations.

SYSTEMIC EFFECTS OF HYPERNEPHROMA

1. Fever of undetermined origin (FUO)

According to Petersdorf and Beeson[31] as many as 20% of patients with fever of unknown origin are suffering from malignant disease. Approximately 3% of the patients with hypernephroma demonstrate fever as the only symptom of an underlying renal carcinoma[7]. The presence of fever seems to be independent of pathological and anatomical conditions such as tumor size and invasiveness[8]. The persistence or recurrence of fever after nephrectomy usually indicates the presence of residual or metastatic tumor.

2. Anemia

One author states that between 25-90% of hypernephroma patients will have normocytic, normochromic anemia[24]. In most cases, the anemia seems to be unrelated to hematuria. Anemia is associated with hypernephroma much more commonly than erythrocytosis. The explanation is probably increased hemolysis with inadequate marrow erythropoiesis[21].

3. Erythrocytosis

This is seen in about 3% of patients harboring hypernephroma. When erythrocytosis is discovered, hypernephroma should be ruled out.

4. Erythrocyte Sedimentation Rate (ESR)

Renal tumor is a diagnostic possibility which should be considered with an elevated ESR. In the series by Melicow and Uson[30], 75% of patients with renal carcinoma had an ESR over 30 mm.

5. Leukemoid Reaction

Leukocytosis has been known to occur probably in reaction to several types of malignant tumors including hypernephroma[34]. The exact mechanism for this reaction is not completely understood although it may be an attempt by the immune mechanism to contain the malignancy.

6. Renovascular Hypertension

Arterial hypertension has occasionally been a presenting symptom of renal cell carcinoma and after successful treatment of the neoplasm the patients show spontaneous reversal of the hypertension[10,32].

The incidence of hypertension associated with hypernephroma has been reported to range from 9 to 28%[19,23]. Our experience has been associated with a smaller percentage of hypertension. A screening hypertensive intravenous urogram should uncover unsuspected renal tumors if present.

The possible causes of production of elevated blood pressure in these patients are:

a. **Excessive renin production**—The tumor may compress the main renal artery, producing a stenosis with resultant release of renin, or compression of the intrarenal arterioles may cause enough ischemia to effect renin release.

b. **Arteriovenous fistulas**—The tumors may have arteriovenous fistulas large enough to cause hemodynamic changes in cardiac output and elevation of systolic but not diastolic arterial blood pressure.

7. **Carcinomatous Neuromyopathy**

This syndrome of muscle weakness and wasting is usually associated with tumors of the lung. However, there have been scattered reports of this occurring with hypernephromas with amelioration of the symptoms upon removal of the lesion[23].

8. **Ectopic Hormone Production**

a. **ACTH-like substance**—This has been extracted from many tumors including hypernephromas[18,25]. This hormone may produce a cushingoid state along with a marked hypokalemia. Failure of suppression of urinary 17 hydroxy corticosteriods with 8 mgm dexamethasone suggests an etiology other than adrenal hyperplasia and tumor should be ruled out.

b. **Parathyroid-like hormone**—Destruction of the skeleton by metastatic tumors may produce hypercalcemia especially with osteolytic metastatic lesions[39]. However, hypernephromas may produce hypercalcemia without direct bone destruction via the mechanism of ectopic production of a parathyroid-like hormone. This hormonal production from non-parathyroid tumors including hypernephromas has been documented by several investigators. This results in a state identical to that seen with primary hyperparathyroidism. Hypercalcemia may dominate the clinical picture and may be the only symptom of the underlying neoplasm. The symptoms of hypercalcemia such as drowsiness, disorientation, confusion and psychosis may be misleading and may be misinterpreted. Gastrointestinal symptoms may be very prominent. The association of gastrointestinal symptoms and excess parathormone levels should be kept in mind[15]. Recurrence of hypercalcemia after nephrectomy may herald the appearance of metastases on the basis of renewed production of parathyroid-like hormone. Prostaglandin E has recently been implicated in the production of a hypercalcemic state in hypernephroma patients.

Several associations have also been made with other endocrine organ tumors and hypernephromas. These include Sipple syndrome with associated bilateral pheochromocytoma and thyroid carcinoma[27,29].

9. **Hepatic Dysfunction**

In 1961, Stauffer[37] first described a reversible syndrome of heptomegaly and hepatic dysfunction in association with hypernephroma without evidence of hepatic metastases. These changes are accompanied by the biochemical ab normalities of increased BSP retention, elevated SGOT and alkaline phosphatase. A thrombocytosis is also frequently seen. Angiographically there is hepatic hypervascularity without any evidence of neoplastic metastatic involvement. Histologically there is a nonspecific reactive hepatitis. Since 1961 many instance of this phenomenon have been reported both in association with other visceral tumors as well as with renal xanthogranulomatous pyelonephritis[38,48]. Hepatic dysfunction is associated with about 10% of hypernephromas[33].

The abnormal liver chemistries are reversible following resection of the renal carcinoma and their presence is not a contraindication to radical nephrectomy. The automatic assumption that abnormal liver chemistries in a patient with hypernephroma indicates metastases is not valid. Very often the issue of metastatic disease must be settled by exploration.

It is postulated that some humoral factor is released by the body which produces this hepatopathy. Attempts to reproduce the hepatic abnormalities by injecting renal tumor extracts into animals has not been successful.

Unfortunately, the occurrence of this entity has, on occasion, led to mistaken diagnosis of primary liver disease. Occasional surgical explorations for suspected hepatic or pancreatic malignancy have been performed before the discovery of the underlying renal carcinoma[47]. The important point is to be aware of the reversible nature of the hepatic dysfunction and not to assume that hepatic dysfunction is synonymous with hepatic metastases.

There have been cases of reversible hepatic dysfunction which cleared when the primary tumor was removed only to recur when widespread metastases became evident.

SUMMARY

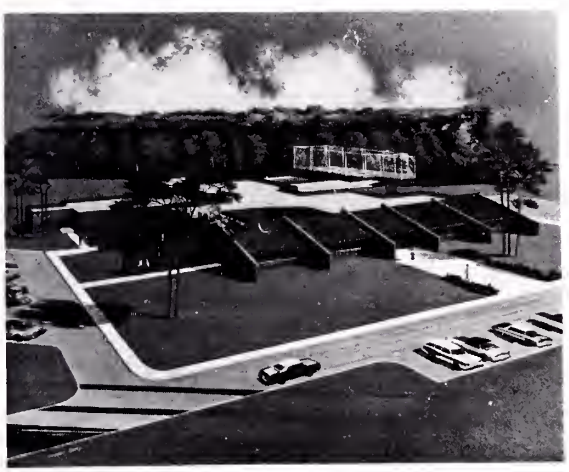
Renal cell carcinoma may aptly be called the great masquerader. Intravenous pyelograms (IVP) should be utilized early in the workup of patients exhibiting any of the signs and symptoms described above. If the IVP is abnormal, angiography and ultrasonography may be utilized to achieve a diagnostic accuracy of greater than 95%.

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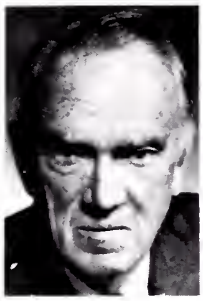
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Howard C. Taylor, Jr., M.D.

Maternal & Child Health & Family Planning

"The subject of this address is 'Maternal and Child Health and Family Planning,' or more precisely, the mutual advantages of integrating the services for these two great objectives. These advantages must be examined from two standpoints. For the improvement of maternal and child health, family planning is essential, if pregnancy is not to occur at too frequent intervals in those who are very young or in the relatively elderly. For the promotion of family planning practices, the occasions when health services are given offer special opportunities for education and provision of services. These mutual advantages are relevant everywhere, but especially in the less developed countries of the world with which this address will be principally concerned."

Howard C. Taylor, Jr., M.D.

THE 1976 JEROME COCHRAN LECTURE DELIVERED APRIL 16, 1976, DURING MASA'S 115th ANNUAL SESSION IN MONTGOMERY

Family planning as an essential...

The importance to the health of women and children of an appropriate pattern of reproduction is generally accepted. In the United States where good maternity care is the rule and maternal and infant death rates are low, the effects of unfavorable patterns of childbearing are no longer very apparent in mortality statistics. Nevertheless, pregnancy in teenagers is accompanied by obvious social and psychological problems, often of a lasting nature. Pregnancy after the age of 40 does carry with it the special risks to the mother from complicating constitutional disease and to the child an increased chance of genetic abnormalities. Formerly, the too rapid repetition of pregnancies could easily be shown to be associated with an increased infant mortality. In the United States and other developed countries, the risk to life from the rapid sequence of pregnancies have nearly disappeared. The effects on health, both physical and mental, may still be severe.

In the so called less developed countries, where health facilities are often inadequate, the effects of unfavorable patterns of childbirth mortality are quite apparent. In many countries, the common condition of malnutrition with anemia makes it difficult for the mother to survive even modest obstetrical hemorrhage. For the infant, the rapid recurrence of pregnancy in the mother reduces the length of lactation and subjects it to the hazards of artificial feeding. Pregnancy in the very young is so much an inherent cultural characteristic in many lands that it is difficult to evaluate special risks, but the increased maternal mortality among women of high parity has been repeatedly shown.

The present need for family planning, as a direct aid to maternal and child health, in the less developed countries is therefore very great indeed. The economic burden of rapid population growth, as it affects health service budgets is an indirect, but perhaps greater factor in adversely affecting the health of mother and child.

In the high birth rate countries, maternal mortality may be ten to twenty times as high as in most developed countries and infant mortality figures of 100, or even 200, per thousand are common.

The potential contribution of family planning or, in its collective sense, of a reduction in the rate of population growth, to public health is incalculable.

Maternal-Child Health Services as a base...

Having noted briefly what family planning practice may do for health, I turn to the converse relationship, namely what the maternal-child health services may do for the promotion of family planning. This aspect I will discuss in greater detail. It has been the principal object of my professional interests during the last ten years.

Before turning to a description of the forms of cooperation between maternal-child health family planning, it will be useful to look briefly at the world situation with respect to population. In particular we must note the several alternative principles on which attempts are being made to control the so called "population explosion."

Reference must first be made to the subtle change that has recently been occurring in the world's attitude toward the population problem. A few years ago the road to population control, although promising to be a long one, seemed fairly clear. The relation of over population to economic growth was widely accepted and one government after another was coming to support the policy of slowing the rate of population growth. Fewer people would, it seemed obvious, allow available resources to go further.

Then came a startling reversal in the accepted sequence of cause and effect. Economic development, it is now often said, must be given priority for with economic improvement, there will inevitably follow a slowing of population growth. The validity of this course has, indeed, been demonstrated in the industrialized countries of the West, but over a period of two centuries.

Family planning, as the primary means of solving the population problem, is therefore under criticism and must prove itself. The term even evades a sharp definition. "Family planning" implies, I think, the provision of supplies and services, with an appeal to the self interest of individual men and women. The arguments are health and happiness, economic benefits, a better future for the fewer children to be born.

The degree of success of family planning programs in the last decade or two has varied according to the region in the world, perhaps largely in relation to the degree of development of each. For the crucial less developed countries, the results have been encouraging to some observers, disappointing to others.

The rate of reduction in the birth rate in different countries has, of course, varied greatly. One can consider three groups. In the industrialized countries of Europe, North America and Japan the birth rate has decreased so that it hovers around the replacement rate. In a few intermediate countries, the birth rate has decreased substantially, Taiwan, Korea, Singapore, Sri Lanka, Costa Rica. In the majority of the others, the decrease has been slight or indeed questionable.

Basic principles...

It is with this background that one turns to a search for the type of family planning program that will be most effective. To examine the question, it is necessary to identify for the purpose of contrast certain general types of programs. This is not simple, because programs in operation rarely employ a single principle. Nevertheless, I will propose that it is possible to recognize three types of programs or, perhaps better, three sets of principles under which programs may operate.

The first of these may be termed the **general approach** to the Public with information and the offer of supplies and services to those who want it. The second consists in a systematic **registration and contact** with all eligible couples in a given region. The third depends on the **integration of the family planning program with the health services**, contacts being provided by the occasions in which medical attention, particularly during pregnancy, is sought.

1. The General Approach

The general approach is apt to be historically the first one tried in any region. It has taken many forms, often employing carefully studied techniques for disseminating the message.

In the industrialized countries, although some forms of birth control have doubtless been practiced for decades, if not centuries, the formal programs began with the opening of privately initiated clinics such as that of Margaret Sanger. Simply through information provided by journals, books and the public media and through a gradual acceptance by the medical profession resort to contraception has come to be widely practiced in most of the industrialized countries. Only a small residue of the population, out of contact for geographic or social reasons, has remained untouched by this pervasive general approach.

In the less developed countries of Asia, Africa and South America, the general approach has not met with such universal acceptance. The reasons are simple to find in the lack of conditions essential to the success of this approach. Literacy rates are apt to be low and means of communication inadequate. Funds are limited and clinical facilities often primitive. The economic advantages of a small family are not readily apparent to the individual.

The evaluation of the programs based on the general approach principle lead to conflicting conclusions. Records of the numbers of acceptors are, at first, at least encouragingly high. Analysis, however, often shows that the acceptors are chiefly in cities, especially among the more educated and well-to-do. In the rural areas, where the great majority lives, acceptance rates may be low and restricted to those with already very large families. For these rural people of the less developed countries, more than a general provision of information and a general offer of services seem essential.

2. Systematic Registration and Contact with Eligible Couples

The second program type is characterized by the systematic identification and individual contact with so called "eligible couples." An eligible couple is one in which the wife is not known to be infertile and is 15 to 45 years of age. In a typical rural program of this kind, field workers visit all of the homes, talk to the wives and husbands, present the advantages of spacing of pregnancies and of the termination of child bearing at a reasonably early age. Supplies may then be offered or appointments made in a family planning clinic. Such contacts are made without special regard to the time of the last pregnancy.

The successes and problems of a program of this type are well illustrated by the results of a project conducted in the Howrah District near Calcutta, India. Three areas of about 10,000 people each, characterized as "urban," "rural" or "slum" were studied. Problems of three steps in the program were examined, namely, (1) contact, (2) initial acceptance and (3) continuation after a year. Contact was possible for a large proportion of all eligible women. Initial acceptance of oral contraceptives varied, according to

region, from 24 to 42 per cent. Continuation rates ranged from 30 to 66 per cent of these initial acceptors.

Of the eligible couples in this intensively treated region, it appears, therefore, that after one year roughly a sixth were practicing contraception. Whether this is a discouraging or promising result is hard to say. Did continuation drop still further in subsequent years, or did the practicing sixth serve as a focus from which contraception gradually spread. This method, the systematic approach to eligible couples, is a promising one and seems well adapted to the people unresponsive to the general programs. It is expensive and in lands where so many health problems exist, government officials may hesitate before concentrating all the energies of numerous field workers on a single objective.

The identification of the eligible couples and the monitoring of their reproductive activity, either through persuasion or coercion, may be the ultimate method. A recent report appearing in the New York Times notes that in certain states and cities in India lists of all eligible couples have been compiled and economic measures planned to make sterilization compulsory after 2 or possibly 3 children. Such a system, if made effective, might in due time solve the problem of the population explosion.

3. Family Planning Based on Maternal and Child Health Services

The provision of instruction and supplies through the Health Services is the third type in our perhaps somewhat arbitrary classification of identifiable types of family planning programs. This, may of course take a great variety of forms. The most systematic of these assumes a carefully planned approach to all pregnant or recently delivered women. When maternity care is the general custom, such a plan may provide contacts as universal as the registration of all eligible couples. The woman and her husband will receive contraceptive education with the first pregnancy, and this will be repeated, if necessary, with each successive one.

Maternity hospitals and obstetrical services in this country have long operated special contraceptive clinics. These at first were only for women having some chronic illness rendering another pregnancy hazardous. The proportion of delivered women acceptable by these clinics in the United States steadily increased over the years. The first clinic that I am aware of which aimed to offer essentially all delivered women contraceptive advice was initiated by Robert Hall in the Presbyterian Hospital in New York in 1963. During the first 12 month period, 1,083 clinic patients, out of a total of 3,009 ward deliveries were fitted with an intra-uterine device. The acceptance rate of over a third at once indicated the special effectiveness of this timing.

From this experience, certain advantages of the so-called postpartum approach, became apparent. These seemed to be as follows:

1. In such a demonstrably fertile population as these recently delivered women, unless some contraceptive measures are adopted, another pregnancy will almost certainly follow in a few months.
2. The physical facilities and, more particularly, a nursing and medical staff, in whom the woman has learned to have confidence, are already available.
3. During pregnancy and the postpartum period, the subject of birth control is highly relevant and its discussion accepted as appropriate and proper by the women and their husbands.
4. Where obstetrics is institutionalized, the system makes a universal contact possible, with the first pregnancy and repeated with subsequent ones.
5. Finally, the presentation of the family planning idea in the context of maternity care is acceptable in many countries where single purpose contraceptive programs are not.

Soon after the initial test of these principles, the International Postpartum Family Planning program was organized under the sponsorship of the Population Council. The project was begun in 1966 and was continued for a period of eight years. It has proved to be a most important undertaking, with the participation of 138 institutions in 21 different countries. The plan provided for some level of information during antepartum visits, further discussion at the bedside during the lying-in period and reference to a family planning clinic for postpartum advice.

The results have been most carefully analyzed. The combined total of women delivered or treated for abortion in all the hospitals during the period of the test study amounted to about three and a half million. Acceptors of contraception were counted in two ways. Direct acceptors were those who adopted contraception within three months of delivery. These amounted to an average per cent of the women cared for by the hospitals. Indirect acceptors were those delivered in the institution but returning for advice only after three months and those coming to the clinic on the advice of direct acceptors. The number of acceptors of the two classes amounted to 1,140,000 women, or 33 acceptors per 100 deliveries or abortions managed by the participating institutions. The average cost per acceptor, $5.00, compared not unfavorably with that of the majority of national programs of other types.

A point of striking interest in the review of the data was the wide variation in the acceptance rate achieved by different institutions. This was doubtless in part due to the basic differences in the readiness of different populations for the ideas of planned conceptions. Further, however, were undoubtedly the differences in the quality of the educational preparation, the time devoted to instruction, the availability of interesting teaching aids and eventually to the degree of dedication of the various directors and their staffs.

Feasibility...

Long before the 8 years of the International Postpartum Program were completed, it was evident that it would achieve at least some degree of success. Many similiar projects, on a less formal basis, were begun in other institutions, both in the United States and in other parts of the world.

These programs, it must now be emphasized, were hospital based. They enjoyed the great advantage of being

directed to women who were relatively favored in education and standards of living. Furthermore, in the hospital system, they became a kind of captive audience, available to their instructors and in general favorably inclined toward the advice of their medical supervisors.

The great question remained – and indeed remains today – of whether the postpartum principle of family planning can be extended to women delivered in their homes by relatively untrained attendants. In our early enthusiasm, derived from the evident success of the postpartum hospital programs, two of us, perhaps rather naively set out to study how these principles could be applied in the rural areas of the less developed countries.

For those of us who have practiced in America, conditions of medical care in these distant areas are almost beyond comprehension. My own direct contacts with these regions have been brief, but fairly numerous, during the last 10 years. After a decade, I still find myself unable to

"The potential contribution of family planning or, in its collective sense, a reduction in the rate of population growth, to public health is incalculable..."

reconcile the organized precision I had been used to in a big city hospital in America with the apparently untroubled acceptance in the villages of Asia, Africa and to a degree of Latin America of health conditions that have changed little over centuries.

Between one and two billion people live in the rural areas of the less developed counties. One half of the men and three quarters of the women cannot read. The majority never see a physician from birth to death. Most deliveries are conducted by indigenous untrained attendants, designated as dais or dukuns or by a dozen other names, according to the country. A high perinatal and infant mortality is an accepted fact of life, more than compensated for by the persistently high birth rates. In general, the people are unaware of the possibilities of modern health services. Vast numbers have never heard of the possibilities of systematic family planning.

Believing that the maternity experience was the most favorable setting in which to inform and give service in family planning, Bernard Berelson and I set out in 1969 to study the feasibility of a general program for population control based on an upgraded maternal-child health service. We set out to find:

"What would it take in everything required – in personnel, physical facilities, training facilities, transport, supplies and equipment, and funding – to bring some minimal professional and para professional attention to every pregnant woman in a number of developing countries, before, during and after delivery, for the double purpose of promoting maternal/child health and family planning?" The results of this study have been published in The Population Council's journal *Studies in Family Planning.*

The investigation, which produced interesting if controversial results, was conducted in the following stages:

1. A list of minimal functions for a combined Maternal-Child Care/Family Planning System was first set down. It included, two antepartum contacts, a trained attendant at delivery, at least three contacts during the first year after delivery; accessible facilities for the hospitalization of complicated cases and a system of record keeping.

2. The next step was the presentation of a theoretical model, (actually two models – one for the urban and one for the rural population) that would, we believe, be able to provide these minimal services. The rural model, for example, designed for units of 100,000 people, was based on a Maternal-Child Health Center of 20 beds with a doctor and 5 midwives in attendance. Related to the center were 25 substations each with an auxiliary midwife, each relating to 4000 people. This would have required her to do 160 deliveries a year in a typical country with a birth rate of 40 per 1000. This model is not very different from ones in operation or contemplated in many developing countries.

The urban model, applicable to a much smaller group of people, was based on the principle of short-stay hospitalization, with trained midwives doing most of the work, and a physician available for major problems.

3. The third step, the difficult one, was to make a survey to determine what was now available in a number of developing countries. A collaborator was found to collect this information in each of 10 large countries or states. These included Colombia in South America; Ghana and Kenya in Africa; Iran and Turkey in the Middle East; the states of Orissa and the Punjab in India; Indonesia, Thailand and the Philippines in Eastern Asia. An enormous volume of figures was accumulated on existing facilities and available personnel of several categories. In addition data were procured on salary scales, costs of construction and of the training of needed additional personnel.

From all of this information it could be calculated that the needed additions to the annual health budgets of our eight countries and two Indian states ranged from 36 cents to $1.65 per inhabitant, with an average of 60 cents. With this basic figure it was easy to extrapolate to the cost of a world program. This proved to be about a billion dollars a year for all women in the less developed countries. (We did not include the People's Republic of China, about which we knew even less in 1970 than we do now.)

This figure of a billion dollars seemed small considering the objective of providing maternal and child care and family planning services for the 1.5 billion people in the rural areas and the city slums of the developing countries.

Full of enthusiasm, we announced the plan and its prospects at a press conference in New York. A small back page article in *The New York Times* was the only result. Then nothing happened. It was evident that the plan, its costs, and the possibility of its success had to be demonstrated in one or more field trials.

Field trials...

The organization of the field trials, to test the implications of The Feasibility Study, has proved far more difficult than we had anticipated. Obstacles and disappointments have been encountered at nearly every step.

At the outset, we outlined for ourselves certain general requirements. An area to be suitable for the proposed study had to be largely rural, typical of the country in which it was located and, to a degree, representative of a large region of the world. The project area should, we felt, be fairly large, because we were aware that with a small group of people and a large group of workers, results might be obtained that were meaningless for future planning. Our study areas have therefore had populations ranging from 300,000 to 600,000 inhabitants. Finally the organization with respect to personnel, physical structures and attempted services had to be realistic, with a budget that might permit future expansion, should the system prove a success.

During about five years of work, we have visited and formulated detailed plans for projects in 8 countries. Of these eight projects, those for Brazil, Egypt, Bangladesh and Mexico, failed at some point to progress to realization. We have succeeded in starting projects in four other countries: first, in Indonesia; later in the Philippines and Turkey; and most recently in Nigeria.

Plans of procedure...

In preparing plans for the operation of each project, we kept steadily to the idea that we were to build up the health services for mother and child, with the intent to use these to promote the practice of family planning. Figure 1 gives in bare outline how the dual objectives are interrelated at various stages in the antepartum and postpartum course.

1. Identification of the Pregnant or Puerperal Woman

The initial contact with the pregnant woman in remote rural areas offered the first problem. In general, she does not voluntarily seek the care of the offered health services. The discovery of cases of pregnancy by the Health Service staff requires therefore the help of the village head man, the sometimes unwilling cooperation of the traditional birth attendant or possibly the house to house visits by trained field workers. Even the finding of the postpartum woman with her newborn child may not be simple, for birth registration may not be practiced and at best is delayed and incomplete.

2. The Antepartum Period

With the pregnant woman identified the next step is to persuade her to accept antepartum care, either by coming to the clinic or receiving the visits to her home of the trained midwife or field worker. During this period, she is introduced to the idea of family planning with the hope that she and her husband will be ready to accept a definite prescription after delivery.

	Detection	Antepartum	Parturition	Postpartum	Infancy
M.C.H.		Maternity Care		P.P Care	Immunization Nutrition
F.P		Education Motivation		Motivation Initiaton	Continuation

FIGURE 1. Thirty Month Schedule of Integrated Maternal/ Child Health and Family Planning Services.

Such offered antepartum care even in its simple health aspects is not, however, eagerly accepted. Such supervision in pregnancy is not part of any traditional routine to these rural women and there are plentiful examples of a discouraging under-utilization of even the scant health facilities offered in many areas.

3. Delivery

Labor and delivery are obviously not the occasion for further discussion of contraception, but serve a function in the family planning program. They provide an opportunity for the development of confidence in the attendants and this makes their later advice on contraception more acceptable.

4. The Postpartum Period

The weeks or early months after delivery are crucial to the success of the family planning phase of the program. If the woman is delivered at home, a visit is made during the first week to check the physical welfare of mother and child. At the same time, contraceptive pills may be prescribed or an appointment given in the clinic for the insertion of an intra-uterine device.

At this point some differences of opinion exist as to when contraception should begin if lactation is to be practiced. Lactation, especially if uncomplicated by supplemental feeding, provides a fair protection for several months against conception. Immediate prescription of contraceptives may therefore not be necessary. Furthermore, it is still undecided whether the oral contraceptives, containing estrogens, have a deleterious effect on the milk supply, a serious matter in many of these regions.

5. The Child Care Period

In the hospital postpartum programs, family planning was linked with maternity care alone. Additional supervision at the time of child care visits now promises additional opportunities. Such a plan seems more necessary since the recognition of the fact that *continuation* of the use of contraceptives is as necessary for a program as is original *acceptance*. Many studies have shown that of original acceptors of the pills, for example, only a quarter to a half are still using the method after 12 months. The record for the IUD is only somewhat better. For both methods, usage diminishes further, although more gradually, after the first year.

Women in the rural areas of developing countries are much more willing to bring their children to health clinics than to come for themselves. The need for various immunization procedures, for small pox, tetanus and measles account for some visits. Food supplements for small children may be an added attraction. On each of these occasions, according to our envisaged programs, the subject of family planning is again referred to and the mothers urged to continue for a reasonable period in the interest of their child's health.

The objective of the program is then to introduce the idea of family planning, gradually and gently, during the antepartum period, to press for a decision soon after delivery or certainly before the end of lactation and to urge

perseveranee in use during at least the first one or two years of the infant's life. The requirements for a Maternal-Child Health Service provide natural occasions on which to carry out eaeh step in the family planning program.

Projects in operation...

It is now my intention to illustrate some of these points by reference to three projects now in operation, all attempting to use these principles. These are the projects in Indonesia, the Philippines and Turkey. The fourth project, that in Nigeria, is just beginning and I have personally had mueh less to do with its organization than with the others.

1. Indonesia

The project in Indonesia is located in the Regency of Modjokerto in the Province of East Java about an hour's travel by car from the city of Surabaya. Modjokerto is a rough hilly country with sugar cane plantations in the valleys. Except for the main road, travel is by jeep, bicycle or on foot.

The population amounts to over 600,000 people, crowded into an area of 854 square kilometers, giving a density of 742 people per square kilometer. This is the smallest in geographic size and the largest in population of the four projects. The people are farmers, but live in small villages, whieh impress one with the prodigious number of small, not unhappy looking, children.

The entire area before the project began was served by 17 MCH centers, each staffed by one trained midwife. Supervision of medical care was in the hands of eight physicians, each therefore related to 75,000 people. The plan is to construct 34 additional MCH centers, with a trained midwife in each but not to increase the number of physicians.

2. Turkey

The Turkey project is in the Province of Yozgat, situated in the center of Anatolia, some two hundred miles to the East of the capital at Ankara. Not far away are the ruins of the capital of the ancient Hittites. This is high plateau country, rather barren, hot in summer, snowy with unpassable roads in winter.

The total population of the province is again large, a half million or more, but spread through an area of 14,000 square kilometers, giving a density of only 36 per square kilometer, one twentieth of that for Indonesia. The largest town, that of Yozgat, has 30,000 inhabitants, with a few small industries, but for the most part the people live in widely separated villages and work at farming and animal husbandry.

The rural medieal services are much more developed in Turkey than in Indonesia. A few small regional hospitals do exist, but most obstetrical care is given by government trained rural midwives working out of their own homes. The indigenous village midwife is forbidden by law, but it is evident that she is still mueh depended upon. The Government is undertaking a long term program for upgrading the health serviees of Turkey, taking one provinee at a time. Our undertaking will eoincide with the government's new program for Yozgat province.

3. The Philippines

After considering several areas in the Philippines, a half of the island of Bohol was selected. Bohol lies north of the Mindanao Sea between the islands of Cebu and Leyte. The trip from Manila involves an hour's jet flight to Cebu and if you are lucky a half hour's trip by 6-passenger plane to the little air strip on the town of Tagbilaren, the capital of Bohol. Otherwise, the ferry takes 3-4 hours. The island is tropical, mountainous in the interior, very beautiful.

The project involves only half of the island, an area of 2000 square kilometers, with 430,000 people. This gives a density of 215 people per square mile, a figure about midway between that of Indonesia and of Turkey. The people are fishermen and farmers, raising coconuts and rice.

The health system depends on centers in each so called municipality of which there are 22 in the project half of the island. In each center, there is a physician (usually a recent graduate), a public health nurse, a sanitary inspector and one or more trained midwives. The expected number of deliveries in relation to each health center, about 800 per year, is obviously far beyond the capabilities of the single midwife. The indigenous traditional village midwife, is still the principal attendant at labor. Known in the Philippines as "the pilot," she has usually received some instruction and tends to accept a cooperative arrangement with the official health staff.

Summary of available services...

A quick summary of available resources in personnel and physical facilities may help to point up the chief characteristics and some of the problems of these projects.

You will recall the symmetrical diagram which was postulated for the original, theoretical, so called "feasibility" study. It showed a central clinic with a doctor and a number of hospital beds, with radiating lines leading to substations, each with a trained midwife and assistant, to care for a predictable 100 pregnant women and, of course, for their babies each year. The model was, we were gradually to learn, prepared by theoretical, but idealistic and highly motivated, amateurs.

The actual pattern as now being realized differs of necessity from place to place. For all projects, the physical facilities are more widely placed, the trained personnel much smaller, than the theory called for. A Maternal-Child Health Center, usually run by a trained midwife and not a physician, serves as an organizational center. To the clinic at the center, some women can be induced to travel. More often, field workers must travel out to the village homes. This requires more of the staff's already scant time. In some instances, subcenters have been established, staffed perhaps by an assistant midwife, or perhaps run as a clinic with sessions on only certain days of the week.

Let us look now, almost in conclusion, at some figures on what we have at our disposal.

1. Loeation of Proposed Projeets

Table 1 summarizes the location, and contrasts the area, the total population and the density of population in the three projects.

2. Available Personnel

The available personnel, after recruitment is completed, will consist of the numbers shown in Table 2. Certainly in Indonesia, and to a large extent in Turkey, the doctors will function, not as physicians, but as supervisors and sometimes as consultants. In respect to physicians, the Philippines do much better.

With regard to trained midwives, Indonesia is still the worst off, with a predicted ratio of one trained ancillary midwife to 11,400 people or 400 deliveries a year. In this category of worker, the position of the Philippines and Turkey are reversed. Turkey has indeed a large number of so called rural midwives, somewhat briefly trained, so that in the project a ratio of 1 to 3500 people is expected. A special problem exists, because the permissible activities of the Turkish rural midwife are much restricted. They are still not allowed, for example, to insert an intra-uterine device.

3. Expected Conditions of Delivery

It is not very informative to list numbers of clinics or health centers, because they vary so much from each other in size and staffing. A more useful characteristic for defining the problems is found in the conditions under which women will be delivered in the different areas. This characteristic is a vital one in predicting the probability of success of a postpartum family planning program. Clearly, most can be accomplished when delivery is carried out by a highly motivated, trained personnel, especially in the impressive surroundings of a hospital. At the other extreme, the least can be expected when the attendant is an untrained, village midwife, who may even see family planning as a threat to her livelihood.

The wide differences in what can be hoped for in the three program areas is apparent from Table 3. In Indonesia, even with the new facilities and personnel, the great majority of women in labor will still be attended by the traditional dukun. In Turkey, the majority of women are delivered by trained rural midwives, and even a fair number in hospitals or health centers. The Philippines illustrate a somewhat intermediate position. Our objective in the next few years will be to find out what can be accomplished with respect to both health and family planning with these various levels of available service.

4. Costs of Services

The subject of costs of such programs is a large one and can only be touched upon very briefly. The money for the field trials has been largely provided by the United Nations Fund for Population Activities and, for the three projects together, amounts to about five and a half million dollars for the 5-year period.

The costs per capita, i.e., per inhabitant, are of special interest. Since this is a research program, the cost includes money spent for statistical evaluation as well as for the operation of the program itself. In Table 4, the figures in the last column, those chargeable to the costs of ,the services alone, indicate a range of 18 cents to 52 cents per capita per year. The mean is about half the figure that Mr. Baerelson and I had estimated as being necessary. We had set out to calculate what it would take to do what we believed was an essential job. In each instance, however, the

TABLE 2.
NUMBERS OF PHYSICIANS & AUXILIARY MIDWIVES IN RELATION TO POPULATION FOR EACH PROJECT

	Population Per Physician	Population Per Auxiliary Midwife
Indonesia	75,000	11,400
Philippines	4,300	6,300
Turkey	13,000	3,500

TABLE 3. EXPECTED CONDITIONS OF DELIVERY IN PERCENTAGES FOR EACH PROJECT

	Health Centers or Hospitals	Home by trained Auxiliary	Home by indigenous Midwife
Indonesia	5	15	80
Philippines	10	30	60
Turkey	30	50	20

TABLE 4. ESTIMATED COSTS OF PROGRAMS FROM EXTERNAL FUNDING (IN U.S. DOLLARS)

	Total Program Costs, 5 yrs.	Total Per Capita Costs Annual	Service Per Capita Costs Annual
Indonesia	$1,497,400	$0.48	$0.18
Philippines	1,738,581	o.80	0.31
Turkey	2,395,973	0.93	0.52
Total & Averages	$5,631,054	$0.74	$0.34

TABLE 1. LOCATION OF PROPOSED PROJECTS WITH AREAS AND POPULATION SIZES

Country 2	Region	Area (Sq. Km.)	No. of Inhabitants	Population per Sq. Km.
Indonesia	Modjokerto	640	622,000	972
Philippines	Bohol	2,000	430,000	215
Turkey	Yozgat	14,123	513,000	36

local authorities had insisted on redefining the objective. We are in effect investigating how much can we accomplish with a sum that might be available in the foreseeable future for a service essential to the country as a whole. The amount we have had to use will, I believe, accomplish only part of the original objective, the provision of health and family planning services for all women.

Conclusion...

This perhaps somewhat complicated review of recent and current experience may lead to several rather simple ideas.

Most persons in America are aware of the population problem, the predictable doubling in the number of people in the world in perhaps thirty years, the predictable famine in many areas and the attendant social and political disorder. Yet in a general sense, all of this is remote in time and space from us. Often we are simply irritated that those countries with birth rates of 40, instead of our 15, do not do something about it. If they are hungry, it will at least be largely their fault.

Closer examination of conditions in these countries makes the slowness of their progress clearer. Most of their people are unaware of what is happening to them, their traditional values and beliefs untouched by ideas relevant to the problem.

There are many possible ways in which, given time, these people of rural Africa, Asia and Latin America may be reached. This lecture has dealt with one means, the use of the Maternal-Child Health Services as the vehicle for conveying the message to individual women and their husbands. The costs of a world program of this type would be considerable, but could easily be met with a fraction of the money now spent for less worthy objects.

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The Case Against Mandatory Continuing Medical Education



By BENJAMIN B. WELLS, M.D., Ph.D.*

MANY public leaders, medical and non-medical, are calling for a massive effort in continuing medical education in the expectation that the quality of patient care will be proportionately improved. As a means to this end, various threatening maneuvers are being made by professional organizations and governmental bodies which now seem to bring us to the brink of an era in which continuing education will be mandatory upon all who engage in the health care enterprise. Many seem ready to abandon the force of traditional professionalism, the fundamental ethic of quality performance, or trust in the individual warranty for service. Perhaps this is an inevitable development of our time, but we owe it to all concerned to examine with utmost care the rationale, the objectives and the methods of continuing medical education, before we impose this costly judgment on ourselves and our successors.

I hasten to emphasize what I hope may be obvious; namely, that I have a personal and deep concern for the development of effective programs in continuing medical education. I speak only to the question of compulsory or mandatory CME in whatever form it may take. That which is compelled by our own professional organization is, in my opinion, not substantially different from that which is mandated by state or federal government. Practically every "good" movement of our time has begun as a voluntary ideal, but it has ended in a set of regulations administered by a bureaucracy.

IS CONTINUING MEDICAL EDUCATION THE ANSWER?

We tend to forget that the truly major determinants of health and longevity are of non-medical origin. Scarcely anyone will doubt the importance to health of indoor plumbing, insecticides, practical housing and agricultural methods to furnish an adequate diet. At this point in our national history, general education and family income must have a higher priority for health than any element in what we call the health care delivery system.

If we look within the system itself for causes of substandard care, we encouncter first the problem of no care at all. Many people who are sick or in danger of illness simply never see a physician. Potential patients often lack access to the system for geographic or financial causes, or they may just lack transportation. More frequently people do not know how to enter or to use the existing system.

Carelessness or indifference can be listed as a second major cause of substandard care. All health workers share the responsibility for a substantial number of patients who get into the system but who, for some reason or other, fail to be handled in a courteous and sensitive manner, especially in the critical initial phases of care. Human nature being as it is, we must work constantly to avoid indignities, delays, improper referrals and misunderstandings that can threaten the welfare and even the life of patients.

Communication problems loom large among the causes of substandard medical care. The nurse cannot read the doctor's orders; the pharmacist cannot read his prescription; a laboratory report fails to reach the patient's record in time; the patient or his relatives fail to understand the treatment regimen, so we have another case of "non-compliance."

Still another unfortunate defect is a kind of meddlesomeness. On this point, the doctor is most often at fault. The practice of so called "defensive medicine" tends to generate many examples. The patient is over-investigated for fear of missing something. The use of "routine" or "battery" tests can also fall into this category. Invasive procedures should be avoided when non-invasive methods will serve the purpose. There should be no such thing as a "teaching procedure." Good teaching is a demonstration of the right thing to do, not an unstructured experiment.

At a higher level in the chain of events, the quality of medical practice can fall short because of an inadequate data base. Although physicians generally know what constitutes a proper patient record, our performances seldom reflects this degree of understanding. We often fail to ask the right questions, we fail to record some observations, we forget to list a test or procedure that we ourselves carry out. Not infrequently we simply fail to listen. A particularly troublesome defect in this category is a failure to record the fact that certain instructions and advices have been given to the patient. This creates a fertile area for malpractice litigation.

Sheer ignorance is probably the least common and the least important cause of poor medical practice. All the really consequential causes of substandard care, as listed above, are seldom, if ever, addressed in programs of

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continuing medical education. Believe me, this is not to suggest that we should be satisfied with the current state of knowledge in any group of health care providers. Quite to the contrary, our right to continue in the practice of medicine must be based upon evidence that all physicians are carrying on an adequate program of continuing education *on a voluntary basis.* My plea is for perspective on this topic. Continuing medical education in its current concept is not *the* answer, as many would have us believe, to all the problems that bedevil the health care field.

FALSE IMPLICATIONS OF COMPULSORY CME

In formal programs of CME we find certain misleading implications that are subtle, never overtly expressed, nontheless pervasive. First, there is the notion that the knowledge conveyed in courses is somehow certified as correct. Almost everyone who teaches must, in some part at least, cling to the fantasy that his material is a close approximation to eternal truth. Perhaps the charisma of good teaching begins with a degree of self-delusion. No one can be convincing until he has convinced himself. Alas, there is a day of reckoning. Biomedical knowledge is, at best, a transient probability. When education is mandated by the ambient society, it will be difficult to avoid the implication that we teach what is certainly true. Otherwise, how can we convince society to enforce the mandate and to defray the costs involved?

A related but somewhat more overt implication is that certain groups and individuals know how to practice medicine and their methods should be immediately transferred to the large body of physicians who do not know how to practice medicine. In some instances, this is interpreted as the "town-gown distinction." To my knowledge, there is no body of evidence to support this idea in this generation, but the implication is certain to produce antagonism if not downright hostility toward much of continuing education.

METHODS OF CONTINUING MEDICAL EDUCATION

Do we know how to teach beyond the level of graduate medical education?The categorical answer is no, but by far the brightest spot in this entire field is the fact that valid experimentation is going on, and real progress is being made. Unfortunately, we have thus far found no way to demonstrate or measure improvements in the practice of medicine as a result of educational efforts. Moreover, we have yet to develop objective methods to determine educational needs among physicians and other health care workers. Hopefully, the process of patient care audit, as a part of PSRO, may yield new and useful insights into educational needs. For the time being, however, CME remains essentially experimental and pragmatic both in method and content. Again, this circumstance scarcely justifies a mandatory approach.

All too many of those who advocate continuing medical education on a mandatory basis have not adjusted their perspective to existing reality. They visualize continuing education as a sea of expectant faces turned toward a podium from which a "topic expert" expounds the state of his art. Any experienced teacher knows that this format, in any one of several variations, will get you a large number of Continuing Education Credits, but he also knows that as much as 90 per cent of the information generated at the podium is falling soundlessly between the chairs of a non-participating audience.

There are others who think of continuing education in terms of hardware. They dote upon electrically operated motion picture screens, rear view projectors, and public address systems that amplify the most timid voice but do almost nothing for ideas. More progressive schools are busily developing huge libraries and catalogs of "software" designed for the painless conveyance of knowledge and skills. Have we seriously asked ourselves to exactly what purpose is all this feverish activity directed? Are we getting any substantial part of what we pay for?

The need for continuing medical education is far less related to the emergence of new scientific knowledge or professional skills than it is to our failure to change old behavior patterns that are not suited to the requirements of modern health care delivery. The basic problem of CME, therefore, is not the transferrence of scientific concepts but the alteration of human behavior. This is a challenge that few of us have consciously faced in the past. I am confident that these difficult objectives can be met, but they will require time, ingenuity, and extensive revision in traditional methods of teaching.

Under the threat of mandatory CME, we have been overly concerned with the *process* of education. We are urged to register, to count the attendance, to measure the contact hours and to translate these into standard units. We are so busy keeping score that we may forget to play the game. *Our attention should be less on teaching and more on learning. We should look at the doughnut and not through the hole.* Learning is a private and highly individualistic matter into which teachers may seldom penetrate. Learning is an independent process which is subject to no external mandate. We may say that true learning begins with an individual desire, and individual insight into one's own needs, and individual resolution followed by self-discipline and self-responsibility. Teachers, if they are needed at all, only supply a measure of stimulus, select the pages, and change the slides.

Many of us suspect, but do not know, that the behavioral patterns of health care are more likely to be influenced by re-exposure of practicing physicians to the actual environment of teaching clinics and hospitals; essentially the environment of graduate medical education. Thus, we may be about to rediscover the wheel, and to suggest that physicians update themselves by a periodic return to the preceptorship, the internship or the residency experience. This approach, also, is fraught with many problems, but the problems can be solved if or when there is reasonable agreement to do so.

THE COST OF CONTINUING MEDICAL EDUCATION

As CME moves toward a mandatory phase by requirement for membership in professional organizations, by recertification or by relicensure, at least two associated problems emerge. First, educational programs must be

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made available for the entire constellation of health care workers, and, second, some decision must be made as to who will bear the burden of the costs that will be generated.

No one can say at this point in time just what we may be facing in terms of total cost, but almost any type of program extended to 4.5 million health care workers is certain to cost many millions of dollars. How is this to be paid and by whom? So long as CME is on a voluntary basis, interested, ambitious workers will assume a large part of the expense themselves in return for personal satisfaction and opportunity for advancement. If CME is universally mandated, the cost will certainly be passed along to patients or to the taxpayers through government subsidy and management.

In either case, we have another substantial increase in the cost of medical care. As highly justified as this may be, we still must wonder what the traffic will bear. Surely no one will take a cavalier attitude toward a quantum jump in health care cost that would be precipitated by a decision to mandate CME for all workers.

And yet, it can be seriously argued that nothing less than the entire health care team must be involved if CME is to be truly effective. To say the very least of it, we should hope to have some answers to such questions as needs assessment, teaching methods and evaluation before commiting ourselves to so costly an undertaking.

THE IMPACT OF COMPULSION ON PROCESS IN CME

A matter of prime concern to those of us who are engaged in actual production of CME programs is the potential impact of compulsion on the teaching and learning process. We must worry, first of all, that our existing resources will simply be overwhelmed. Thousands of reluctant students pouring in upon us at this time could dilute or even destroy our most valiant efforts. The expected result would become a feckless numbers game in which substandard courses would be contrived to fulfill the credit requirements. This turn of events would certainly lead to cynicism among students and would encourage all manner of evasive techniques to get the required credits at minimal effort.

A not inconsiderable hazard will be the entrance of purely commercial interests to satisfy the market for continuing education units when the capacity of traditional, academic and professional associations has been exceeded. The large number and wide diversity of programs to create the demanded volume of educational units is certain to put an insuperable burden on accrediting agencies as well. This, too, will be a factor of cost to be somehow absorbed by a system already in financial distress.

Health care workers are responsible adults who deserve to be respected as such. For the most part, they have deliberately selected the health field, and they want to do their jobs well. If learning experiences are forced upon these people under threats to their dignity or even to their employment, the outcome is not likely to be an improvement in the quality of their performance. Our chief objective is to bring about a favorable change in behavior. Such a change must be totally accepted by the individual. Appropriate behavior must be willed and made an integral part of each worker's life. This type of goal is rarely fostered by compulsion.

CONCLUSIONS

It is now quite generally accepted that the right to practice medicine entails a moral commitment to a lifetime of learning. To fulfill this commitment, American medicine has been rapidly developing a vast network of programs for continuing medical education. The CME effort is still in a developmental and experimental phase. Although a great deal of progress has been made, many major problems are yet to be solved. How can the practicing physician take sufficient time for CME without seriously disrupting his service functions? How do we identify the faults of medical practice that are correctable by educational methods? How shall we pay the cost of CME extended to all members of the health care team?

These and other questions are being defined and partial solutions are beginning to emerge. Progress on a voluntary basis has been achieved in an orderly manner without overwhelming our capacity to create legitimate learning experiences, and, for the most part at least, without encouraging the development of substandard or spurious programs merely to satisfy arbitrary requirements.

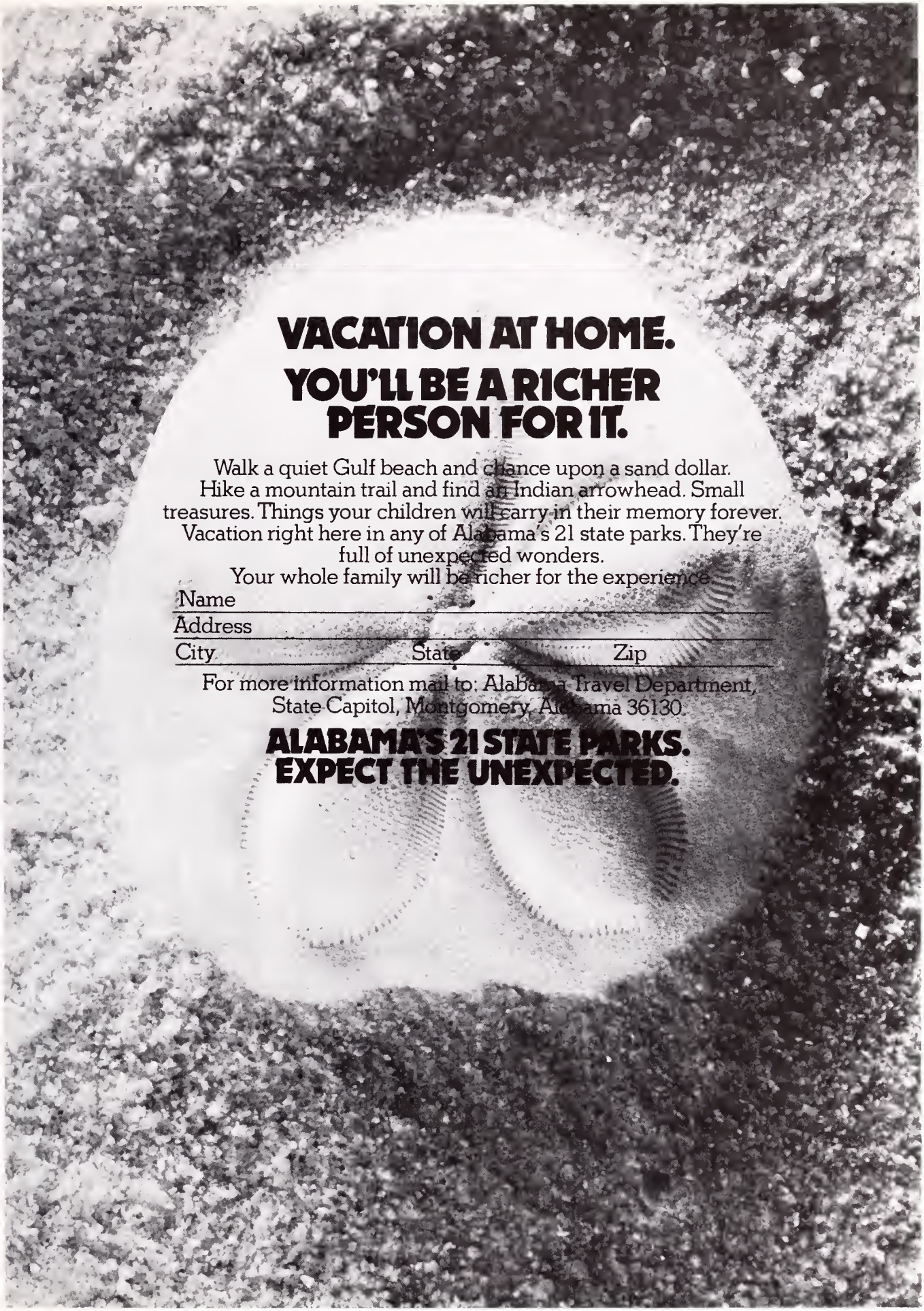
If we are to retain the flexibility to experiment and to adapt both new methods and old ones to the solution of real problems, some of us are convinced that we must avoid all further moves toward mandated CME. There are good reasons to believe that the concept of lifetime learning will best survive and progress in the congenial atmosphere of volunteerism. ■

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BARTON, James Clyde, Jr., b 45, mc Tenn. 71, recip. Tenn. 72, 911 Valley Ridge Dr., No. 203, Homewood 35209. I. Hem.

CANNON, Joseph Martin, b 49, mc Ala. 74, recip. NBME 75, University of Ala. Hospital, 619 South 19th Street, Birmingham 35233. EM.

CURRY, Dodson M., b 22, mc Meharry 49, recip. Kentucky 49, 609 North 15th Street, Birmingham 35203. FP.

EGERMAN, Karl Emerson, b 34, mc Ala. 74, recip. NBME 75, Lloyd Noland Hospital, Fairfield 35064. Pd.

HARD, John Wendell, b 24, mc Washington 54, recip. Missouri 54, 310 Woodward Building, Birmingham 35203. S.

JOHNSON, Alex Martin, b 44, mc Ala. 70, recip. NBME 71, Carraway Methodist Hospital, 1615 25th Street, North, Birmingham 35234. ObG.

KUSHNER, Sheldon Robert, b 42, mc Ala. 66, sb 67, 7901 1st Avenue, South, Birmingham 35206. ObG.

FINCHER, John Albert, Jr., b 48, mc Ala. 74, recip. NBME 75, UAB Station, Birmingham 35294. R.

LANTION, Frances Lina C., b 43, mc Philippines 71, LL 76, 1808 7th Avenue, South, Birmingham 35294. Diabetes.

MAKAR, Youssef Nashed, b 39, mc Fac Medicine Alexandria/Egypt 64, recip. Mass. 72, 1500 6th Ave., South, Birmingham 35233. I-C.

McATEE, John Norville, b 4, mc Ala. 70, recip. NBME 71, UAB Station, Birmingham 35294. I.

McREYNOLDS, Richard Allen, b 44, mc Va. 71, recip. NBME 72, UAB Station, Birmingham 35294. Anatomic Pathology.

PALMER, Martin Doyle, b 40, mc Ala. 66, sb 67, 1515 6th Ave., South, Birmingham 35233. P.

PERRINE, George Meriwether, b 43, mc Ala. 69, recip. NBME 70, UAB Station, Birmingham 35294. I.

POGUE, Robert Hunter, b 48, mc Ala. 74, recip. NBME 75, UAB Station, Birmingham 35294. P.

RAINS, James Conda, Jr., b 44, mc Ala. 70, recip. NBME 71, 1720 8th Ave., South, Birmingham 35233. Oph.

SARASOMBATH, Suttipant, b 45, mc Bangkok, Thailand 67, LL 74, UAB Station, Birmingham 35294. Path.

UNNOPPETCHARA, Kumjad, b 37, mc Med. Sch. Chulalongkorn/Thailand 63, recip. Ga. 75, 1350 Atkin-Trimm Blvd., Birmingham 35266. I.

WEINBERGER, Phillip Courtney, b 42, mc Ala. 74, recip. NBME 75, 1615 25th Avenue North, Birmingham 35234. U.

WINDHAM, Thomas Lynn, b 42, mc Miss. 69, recip. Miss. 69, UAB Station, Birmingham 35294. N.

WINGARD, Charles Shell, b 45, mc Ala. 71, recip. NBME 72, 3928 Montclair Rd., Birmingham 35213. ObG.

MOBILE COUNTY

PARMLEY, Loren Francis, Jr., b 21, mc Va. 43, recip. Va. 43, 5862 Falls Church Road, Mobile 36604. I.

MONTGOMERY COUNTY

DAUGHERTY, Thomas Wilson, b 44, mc Va. 70, recip. Va. 70, 704 Ledyard Place, Montgomery 36109. I.

ROBINSON, Philip Rou, b 45, mc Temple 71, recip. NBME 72, 4014 Green Acres Drive, Montgomery 36111. I.

ST. CLAIR COUNTY

TURNHAM, Alan Cleveland, b 49, mc Ala. 74, sb 76, 207 Mountain Ave., Mt. Brook 35223.

new phone numbers

BARTON, James C., Jefferson, 934-2304.

CANNON, Joseph M., Jefferson, 838-1611.

CURRY, Dodson M., Jefferson, 324-3211.

EGERMAN, Karl, Jefferson, 785-2121.

FRIEDMAN, Benjamin, Jefferson, 934-4430.

HARD, John W., Jefferson, 252-9182.

JOHNSON, Alex M., Jefferson, 254-6000.

KUSHNER, Sheldon R., Jefferson, 833-0156.

FINCHER, John A., Jr., Jefferson, 934-5670.

LANTION, Frances L. C., Jefferson, 934-934-2309.

LONG, Franklin H., Mobile, 433-1887.

MAKAR, Youssef N., Jefferson, 933-7081.

McATEE, John N., Jefferson, 934-5411.

McREYNOLDS, Richard A., Jefferson, 934-3224.

MARSHALL, William A., Cullman, 734-9613.

MAZYCK, Earle F., Houston, 794-3194.

MOSKOWITZ, Maurice L., Dallas, 875-4472.

PALMER, Martin D., Jefferson, 933-9211.

PARMLEY, Loren F., Mobile, 342-6613.

PERRINE, George N., Jefferson, 934-3690.

POGUE, Robert H., Jefferson, 934-4912.

RAINS, James C., Jr., Jefferson, 933-8251.

ROBINSON, Phillip R., Montgomery, 277-6417.

SARASOMBATH, Suttipant, Jefferson, 934-2140.

SHERLOCK, Eugene C., Jefferson, 871-6075.

SNODGRASS, Phillip A., Mobile, 432-0444.

TURNHAM, Alan C., St. Clair, 879-5185.

UNNOPPETCHARA, Kumjad, Jefferson, 428-6378.

WEINBERGER, Phillip C., Jefferson, 253-6000.

WINDHAM, Thomas L., Jefferson, 934-4654.

WINGARD, Charles S., Jefferson, 870-8334.

DAUGHERTY, Thomas W., Montgomery, 277-3853.

HILL, William A., Jr., Tuscaloosa, 759-2582.

deceased

DALLAS COUNTY

STEWART, Jonas H., Jr., Selma—5-14-76.

JEFFERSON COUNTY
APPLEBAUM, S. L., Birmingham—2-25-76.
BROWNLEE, Leslie G., Bal Harbour, Fla.—7-26-70.
CLEMENTS, Frank H., Birmingham—5-13-75.
HORN, J. R., Hueytown—1-31-76.
PRESCOTT, W. E., Birmingham—2-29-76.
TYLER, Richard E., Birmingham—9-30-74.
MONTGOMERY COUNTY
HUBBARD, T. Brannon, Montgomery—5-16-76.
TUSCALOOSA COUNTY
WRIGHT, Rufus D., Tuscaloosa—1974.

removed

MONTGOMERY COUNTY
LIGHTFOOT, Philip M., Jr., Montgomery; and LIGHTFOOT, Robert M., Montgomery—Removed.
TUSCALOOSA COUNTY
RYALS, Jarvis DeVaughn, Pueblo, Colorado; Removed.

specialty changes

MOBILE COUNTY
BRUTON, Shelby Glenn, P.
TUSCALOOSA COUNTY
HILL, William A., I-C.
JEFFERSON COUNTY
HOLCOMB, M. Clifford, Jr., Anes.

reinstated

MOBILE COUNTY
LONG, Franklin Howard, b 42, mc Ala. 69, recip. NBME 70, 1307 Government Street, Mobile 36604. ObG.

address changes

BALDWIN COUNTY
HOWARD, Percy John, Present Fairhope to P. O. Drawer L, Fairhope 36532.
CALHOUN COUNTY
BATTLES, William M., Jr., Present Anniston to P. O. Box 1611, Anniston 36201.
CLARKE COUNTY
PROSPERIE, Michael Dale, Present Jackson to P. O. Box 428, Jackson 36545.
ELMORE COUNTY
EDWARDS, Winston T., Present Wetumpka to 2119 East South Blvd., Montgomery 36111.
RUDELL, Jeffrey H., Present Tallassee to Rt. 2, Box 377, Eclectic 36024.
ETOWAH COUNTY
GREENBERG, Harry Lee, Present Gadsden to Box 17, Gadsden 35902.
FRANKLIN COUNTY
MEYER, Isidore S., Present Russellville to Pineview Hospital, P. O. Box 31, Hwy. 31-N, Hartselle 35640.
JEFFERSON COUNTY
ADAMS, George M., Present Birmingham to 742 Euclid Avenue, Birmingham 35213.
ACCINNO, Mario Armando, Present Birmingham to 801 Princeton Ave., Suite 238, Birmingham 35211.
BOTTA, Louis P., Present Birmingham to 1409 44th Street, West, Birmingham 35208.
BUSHNELL, James J., Present Birmingham to 2018 Brookwood Medical Center, Suite 102, Birmingham 35209.
CAMPBELL, Ernest S., Jr., Present Birmingham to 2018 Brookwood Medical Center Drive, Suite 315, Birmingham 35209.
CARRAWAY, Charles A., Present Birmingham to 2826 Balmoral Road, Birmingham 35223.
CHASTAIN, Truman L., Present Birmingham to P. O. Box 11142, Montgomery 36111.
CHATTERJEE, Alo, Present Birmingham to 460 West 25th Street, Merced, California 95340.
CONNERY, Francis M., Present Birmingham to 2018 Brookwood Medical Center, Birmingham 35209.
COSBY, Joseph C., Present Huntsville to 2512 Hawksbury, Birmingham 35226.
FELGNER, Charles F., Present Birmingham to P. O. Box 3387-A, Birmingham 35205.
FRIEDMAN, Benjamin, Present Birmingham to 634 Zeigler Bldg., Birmingham 35294.
GAINES, Herbert F., Present Birmingham to 1900 Laurel Road, Birmingham 35216.
HANKINS, John G., Present Birmingham to 2018 Brookwood Medical Center, Birmingham 35209.
HATHAWAY, Beulah M., Present Birmingham to South Highlands Hospital, 1127 South 12th Street, Birmingham 35203.
HATZIGEORGIS, George P., Present Birmingham to 1617 11th Avenue, South, Birmingham 35205.
HENDERSON, Ronald E., Present Birmingham to 2660 10th Avenue, South, Birmingham 35205.
JONES, Dewey H., III, Present Birmingham to Brookwood Prof. Bldg., 2018 Brookwood Medical Center Drive, Suite 214, Birmingham 35209.
KANT, Fritz, Present Birmingham to 805 Vestavia Lake Drive, Birmingham 35216.
LEMMON, Gamewell A., Present Birmingham to G-2 Brookwood Prof. Bldg., 2018 Brookwood Medical Center Drive., Birmingham 35209.
MILLS, Patrick L., Present Birmingham to 2018 Brookwood Medical Center Drive, Suite 301, Birmingham 35209.
PEDERSEN, Arthur N., Present Birmingham to Rt. 3, Box 1024, Bessemer 35020.
SHERROD, Henry S., Jr., Present Leeds to 232 Parkway Drive, SW, Leeds 35094.
SIMON, Harold E., Present Birmingham to 801 Princeton Ave., SW, Birmingham 35211.
TERRELL, Clyde, Present Bessemer to 517 North 18th Street, Bessemer 35020.
TILLER, Mary J., Present Birmingham to 1505 10th Ave., South, Birmingham 35205.
VIRGIN, William B., Jr., Present Birmingham to 2950 Argyle Rd., Birmingham 35213.
WALTON, Phillip D., Present Montgomery to 9848 Red Cliff Road, Birmingham 35215.
LAUDERDALE COUNTY
TROUSDALE, Preston S., Present Florence to P. O. Box 2309, Florence 35630.
MADISON COUNTY
ENGLISH, William E., Present Huntsville to 4728 Panorama Drive, Huntsville 35801.
MOBILE COUNTY
BROWN, Nelson L., Present Mobile to P. O. Box 66627, Mobile 36606.
DAUGHERTY, M. Preston, Present Mobile to P. O. Box 6827, Mobile 36606.
FELLERS, Paul Hoke, Present Mobile to P. O. Box 7132, Mobile 36607.
KING, Robert T., Present Mobile to P. O. Box 6827, Mobile 36606.

(CONTINUED ON PAGE 54)

USA Awards Its First MD Degrees

Robert A. Kreisburg, M.D., Dean,
University of South Alabama
College of Medicine

AN OLD TRADITION has been re-established in Mobile, Alabama. In 1859, the first Medical School in the State of Alabama was opened. This school was later moved to Tuscaloosa and then to Birmingham. Approximately 114 years later, the first class entered the new University of South Alabama College of Medicine; thus returning undergraduate medical education to the Mobile area.

1976 is another landmark in the distinguished medical history of this area of the state. The charter class which entered on January 3, 1973 graduated 20 students with the M.D. degree at Commencement Exercise on Sunday, June 6. This group of charter students has helped to shape the traditions and destiny of our school. The faculty, facilities and programs developed concurrently as this class progressed through the curriculum. They now enter the ranks of post-graduate students leaving behind many memories (for both faculty and students). Following this initial small group, classes have numbered 64. Therefore, in the fall of 1976, a full complement of students will be achieved with students from all corners of our state.

WHERE DOES the University of South Alabama College of Medicine go from here? While the nucleus of a vigorous, motivated faculty has been recruited, more faculty is needed to handle the increased numbers of students in the clinical years. The design of the curriculum continues to evolve to meet the changing demands for excellence in many different spheres.

Departmental programs continue to develop. The capacity of the Department of Radiology to improve its service has involved a major capital renovation of space and equipment. The Family Practice programs are progressing with plans for remote site preceptorships, early involvement in the curriculum, and a residency program. The other primary care specialties (Internal Medicine, Pediatrics, and Obstetrics/Gynecology) have expanded their training program. In all departments, the standard is excellence.

The principle emphasis of the University of South Alabama College of Medicine educational programs is a solid foundation in clinical medicine in order to equip our students for a career in primary care. While a balance in the distribution of medical specialties will always be needed to serve the health care needs of our state, the greatest need at the present time is the production and distribution of physicians who will deliver primary care.

BESIDES A solid foundation, the motivation for continuing education must also be inculcated. This is accomplished by a proper medical education atmosphere. We believe we achieve this at the University of South Alabama College of Medicine. ■

Vermox chewable tablets
(mebendazole)

DESCRIPTION VERMOX (mebendazole) is methyl 5-benzoylbenzimidazole-2-carbamate.

ACTIONS VERMOX exerts its anthelmintic effect by blocking glucose uptake by the susceptible helminths, thereby depleting the energy level until it becomes inadequate for survival.
An insignificant amount of mebendazole is absorbed from the gastrointestinal tract. Most of this is excreted in the urine within three days either as metabolites or unchanged drug

INDICATIONS VERMOX is indicated for the treatment of *Trichuris trichiura* (whipworm), *Enterobius vermicularis* (pinworm), *Ascaris lumbricoides* (roundworm), *Ancylostoma duodenale* (common hookworm), *Necator americanus* (American hookworm) in single or mixed infections.
Efficacy varies in function of such factors as pre-existing diarrhea and gastrointestinal transit time, degree of infection and helminth strains. Efficacy rates derived from various studies are shown in the table below:

	Trichuris	Ascaris	Hookworm	Pinworm
cure rates				
mean	68%	98%	96%	95%
(range)	(61-75%)	(91-100%)	—	(90-100%)
egg reduction				
mean	93%	99.7%	99.9%	—
(range)	(70-99%)	(99.5-100%)	—	—

CONTRAINDICATIONS VERMOX is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug.

PRECAUTIONS *PREGNANCY:* VERMOX has shown embryotoxic and teratogenic activity in pregnant rats at single oral doses as low as 10 mg/kg. Since VERMOX may have a risk of producing fetal damage if administered during pregnancy, it is contraindicated in pregnant women.
PEDIATRIC USE: The drug has not been extensively studied in children under two years; therefore, in the treatment of children under two years the relative benefit/risk should be considered.

ADVERSE REACTIONS Transient symptoms of abdominal pain and diarrhea have occurred in cases of massive infection and expulsion of worms.

DOSAGE AND ADMINISTRATION The same dosage schedule applies to children and adults.
For the control of pinworm (enterobiasis), a single tablet is administered orally, one time.
For the control of roundworm (ascariasis), whipworm (trichuriasis), and hookworm infection, one tablet of VERMOX is administered, orally, morning and evening, on three consecutive days.
If the patient is not cured three weeks after treatment, a second course of treatment is advised. No special procedures, such as fasting or purging, are required.

HOW SUPPLIED VERMOX is available as tablets, each containing 100 mg of mebendazole, and is supplied in boxes of twelve tablets.
VERMOX (mebendazole) is an original product of Janssen Pharmaceutica, Belgium, and co-developed by Ortho Pharmaceutical Corporation.

†Because Vermox has not been extensively studied in children under 2 years of age, the relative benefit/risk should be considered before treating these children. Vermox is contraindicated in pregnant women (see: Pregnancy Precautions) and in persons who have shown hypersensitivity to the drug

OJ 288-5R

Ortho Pharmaceutical Corporation
Raritan, New Jersey 08869

The only single-tablet treatment of pinworm



just one chewable tablet, once, usually eradicates pinworm in both children and adults†, and without staining

Vermox

chew tab

(mebendazole)

MINOR, Walter H., Jr., Present Titusville, Fla. to 137 Pineridge Rd., Daphne, Ala. 36526.
PATTON, William B., Present Mobile to 1720 Springhill Ave., Mobile 36604.
SAVAGE, Charles H., Jr., Present Mobile to 3165 Midtown Park South, Mobile 36606.
SEMON, John E., Present Mobile to P. O. Box 6827, Mobile 36606.
SPEIR, Betty R., Present Mobile to 1367 Government Street, Mobile 36604.
TUNSTALL, Peyton R., Jr., Present Mobile to P. O. Box 66627, Mobile 36606.

MONTGOMERY COUNTY
ANDERSON, James N., Present Montgomery to 1722 Pine Street, Suite 1002, Montgomery 36106.
BABIN, Richard W., Present Montgomery to 22 Glendale Court, Iowa City, Iowa 52240.
GUEST, James L., Present Montgomery to 1722 Pine Street, Suite 1002, Montgomery 36106.
HAGER, Roy T., Present Montgomery to 2055 Normandie Drive, Montgomery 36111.
SIMMONS, Earl M., Jr., Present Montgomery to 1722 Pine Street, Suite 1002, Montgomery 36106.

MORGAN COUNTY
JACKSON, Lawrence S., Present Longboat Key, Fla., to P. O. Box 7077, Greenville, South Carolina 29610.
RUBIN, Richard B., Present Decatur to The Retreat, Route 5, 73-B Beltline Road, Decatur 35601.

TALLADEGA COUNTY
GRUBBS, Roy J., Jr., Present Sylacauga to F. Hood Craddock Memorial Clinic, 308 W. Hickory, Sylacauga 35150.
ROBERTS, Edward H., Present Talladega to 210 W. North Street, Talladega 35160.

TUSCALOOSA COUNTY
ADAMS, Harry A., Present Tuscaloosa to 62 Cherokee Road, Tuscaloosa 35401.
McLEOD, John C., Present Northport to 104 Nicole Place, Lake Forest, Daphne 36526.
PACKARD, John M., Present University to The Baptist Medical Centers, 3201 Fourth Avenue, South, Birmingham 35222.
SAVERY, Henry W., Present Tuscaloosa to 2234½ Eighth Street, Tuscaloosa 35401.
STRAHAN, Eva E., Present Tuscaloosa to McFarland Apts., Skyland Blvd. North, Apt. 4N, Tuscaloosa 35401.

WALKER COUNTY
MALI, Daryoush Jamshed, Present Jasper to P. O. Box 2475, Jasper 35501.

New from Lilly/Dista Research

NALFON®
fenoprofen calcium

300-mg.* Pulvules®

DISTA
Dista Products Company
Division of Eli Lilly and Company
Indianapolis, Indiana 46206

Additional information available to the profession on request.

*Present as 345.9 mg. of the calcium salt of fenoprofen dihydrate equivalent to 300 mg. fenoprofen.

690091



Physicians' placement service in Alabama

The Medical Association of the State of Alabama maintains the Physicians' Placement as a service to the medical profession in the state of Alabama. Opportunities for practice in Alabama will be published and will be distributed to physicians making inquiry. Physicians wishing to establish practice are invited to submit a resume to be kept on file with the Association. For further information write to: Mr. Emmett Wyatt, Executive Assistant, Medical Association of the State of Alabama, P. O. -Box 1900-C, Montgomery, Alabama 36104, or Telephone 263-6441.

LOCATIONS WANTED

(Physicians interested in locating in Alabama)

Family Practice: Age 31; Howard University 1973; American Board eligible; seeking partnership, multi-specialty group, solo, single specialty group, or other. Available July 1976. LW-03522.

General Practice: Age 51; National University 1956; seeking solo, Emergency room or public health. LW-03372.

Internal Medicine-Emergency Medicine: Age 29, Medical College of Alabama 1972; National Board certified; American Board eligible; seeking emergency room, industrial, or multi-specialty group. LW - 03382

Internal Medicine: Age 27; University of Miami 1973; National Board certified; American Board eligible; seeking single specialty group, partnership, multi-specialty group, or solo. Available July 1976. LW - 02551

Internal Medicine-Gastroenterology: Age 33; Medical College of Virginia 1969; National Board certified; American Board eligible; seeking multi-specialty group, institutional, single specialty group, or partnership. Available August 1976. LW - 02599

Internal Medicine-Gastroenterology: Age 33; University of Iowa 1970; American Board eligible; seeking single specialty group, multi-specialty group, partnership. Available July 1976. LW - 01817

Internal Medicine: Age 32; University of Kentucky 1970; National Board certified; American Board eligible; seeking solo, partnership or research. Available July 1976. LW - 03320

Obstetrics & Gynecology: Age 34; University of Oregon 1968; American Board Eligible; seeking single specialty group. Available September 1976. LW-10.

Obstetrics & Gynecology: Age 32; Emory University 1970; American Board Eligible; seeking single specialty group, partnership or multi-specialty group. Available August 1976. LW-04049.

Orthopedic Surgery: Age 42; University of Washington 1962; American Board certified; seeking solo or limited partnership, preferably near Gulf Coast, 100,000 plus population Available December 1976. LW-1.

Orthopedic Surgery: Age 36; University of Maryland 1966; National Board; American Board certified; seeking single specialty group, partnership, multi-specialty group or solo. Available August 1976. LW-03545.

Surgery/General Practice: Age 31; University of Florida 1971; Will be American Board Eligible 1976; seeking partnership, single specialty group or multi-specialty group. Available July 1977. LW-01589.

Surgery: Age 38; Jefferson Medical College 1966; National Board certified; American Board certified; seeking single specialty group, partnership, multi-specialty group. Available August 1976. LW - 02968

Surgery: Age 34; Loyola University Stritch 1968; National Board certified; American Board eligible; seeking partnership, single specialty group, multi-specialty group, solo, or institutional. Available August 1976. LW - 02954

Sophomore Medical Student — age 22, interested in a town or hospital assisting with medical school costs in return for service there in general/family practice. Available 1980. LW-01.

PHYSICIANS WANTED

(Opportunities For Practice)

Internist & Family Physician — Opportunity available for an Internist and a Family Physician in a community ten miles north of Mobile. Excellent growth potential. Financial assistance available. Abundant outdoor activities (30 miles from gulf). PW-15.

Physicians wanted **(General Internal Medicine, Gastroenterologist, Dermatologist)** Trade area, 400,000 population Population of town: 45,000, located in Northeast Alabama. Small town advantages with big city conveniences within hour's drive. Ground floor professional opportunity to join a group of internists in the development of programs in General Internal Medicine, medical specialties, and other disciplines appropriate for the establishment of a regional multispecialty health clinic. Financial arrangements negotiable. No investment necessary. Opportunity for partnership in two years. PW-8

A community with combined population of 10,000 located near Mobile, Alabama is seeking a **general practitioner**. Office space available with living quarters. Several churches and schools. PW-9

General Practitioner's 2 family physicians wanted for general practice in a 64-bed hospital, located between 2 North Alabama towns (in the heart of the Tennessee Valley) with a trade population of 18,000. Office space available. Within 35 miles of large city. Large amount of industrial work in our area. PW-7

WANTED—**General Internist** or Subspecialist with interest in general medicine. University town, population approximately 60,000, to join 4 other internists in a multi-specialty clinic setting; 250-bed expanding general hospital; all-specialty coverage, office expansion in progress; attractive living area. PW-11

CONTINUED ON PAGE 65

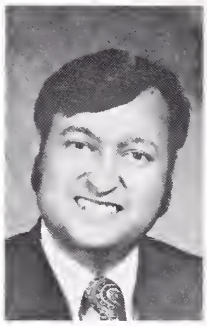
New physicians licensed to practice in Alabama



Boone, Marshall Nolan, Jr., M.D., University of Alabama School of Medicine, 1975. Reciprocity with National Board of Medical Examiners. Location: Huntsville.



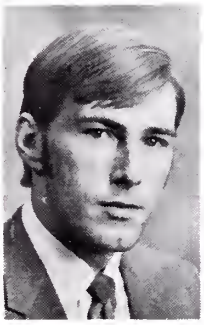
Engleman, Otis Edward, Jr., M.D., South Carolina College of Medicine, 1972. Reciprocity with National Board of Medical Examiners. Specialty: Family Practice. Location: Pensacola, Fla.



Sehgal, Raj Kumar, M.D., India Institute of Medical Sciences, 1970. Reciprocity with Virginia (FLEX). Specialty: Internal Medicine. Location: Winfield.



Boozer, Richard Michael, M.D., Emory University School of Medicine, 1970. Reciprocity with Georgia. Specialty: Internal Medicine. Location: Mooresville.



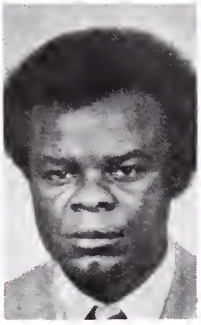
Moring, Joseph Rodney, M.D., University of Kentucky College of Medicine, 1974. Reciprocity with National Board of Medical Examiners.



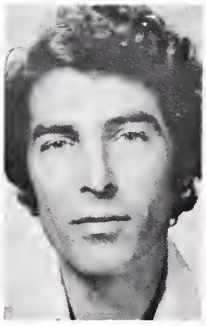
Trick, Thomas Lee, M.D., Indiana University School of Medicine, 1973. Reciprocity with Indiana (FLEX). Specialty: Internal Medicine. Location: Birmingham.



Cometa, Teofilo Mayor, M.D., Col. Med. Manila Univ. (Philippines), 1962. Reciprocity with Virginia (FLEX). Specialty: Surgery. Location: Birmingham.



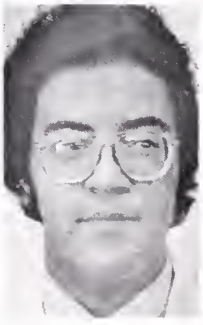
Okoyde, Chudy Nathaniel, M.D., Emory University School of Medicine, 1971. Reciprocity with Georgia (FLEX). Specialty: General Surgery. Location: Selma.



Vitek, Jiri Jakub, M.D., Charles University (Prague, Czechoslovakia), 1959. Reciprocity with Mississippi (FLEX). Specialty: Neurosurgery. Location: Birmingham.



deGuzman, Remigio Terrado, M.D., Univ. of Santo Tomas Fac. Med. (Philippines), 1958. Reciprocity with Kentucky. Specialty: Surgery. Location: Lafayette.



Pegues, Herbert Ulmer, II, M.D., University of Illinois College of Medicine, 1975. Reciprocity with National Board of Medical Examiners. Location: Huntsville.



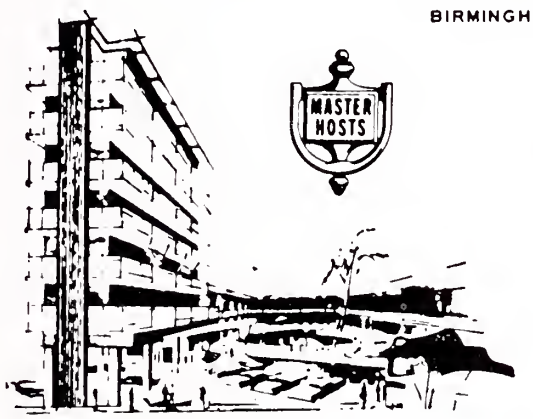
Yadla, Vinaya Kumari, M.D., Kurnool Med. College (Andhra State, India), 1970. Reciprocity with Maryland (FLEX). Specialty: Internal Medicine. Location: Sheffield.

Digest of actions of the State Board of Censors

Herewith is presented a Digest of Actions taken at the Jun 16 meeting of the State Board of Censors:

- Approved Financial Statement for period ending May 31, 1976, showing receipts of $43,225.67 and disbursements of $525,522.29.
- Approved contribution in the amount of $250.00 to American Association of Medical Assistants Convention.
- Approved request for National Health Service Corps physicians for Hobson City, Alabama, with stipulation that the physician be licensed to practice in Alabama.
- Voted to immediately submit 27 names as outlined in the request for implementation of a Program Review Team for Public Law No. 92-603, these names to be selected by an ad-hoc committee from both the Board of Censors and the State Committee of Public Health.
- Authorized MASA's President to meet with appropriate representative of the Alabama Hospital Association to discuss malpractice problems.
- Voted to amend Bylaws of the Association to stagger terms of Council members on a yearly basis.
- Approved budget for CME Department.
- Authorized expenses of four members of Council on Medical Education and the Director of the Education Department to attend AMA's Fifth Biennial Conference on Continuing Medical Education to be held October 5-7, 1976, in Chicago.
- Referred to Council on Public Affairs the matter of public service announcements for the Heimlich Maneuver.
- Approved proposed bill to define death.
- Approved Digest of Actions of Council on Socio-Economics with the following exceptions: (1) non-concurred in Council's recommendation that the Socio-Economics Council assume the responsibility of a Grievance Committee. (2) Voted that the Association notify physicians that limited capability exists in the Medical Association to assist with resolution of interface problems between its membership and third party carriers or hospital Boards of Trustees, and would welcome referral to it of these problems; further, any problems which cannot be resolved by the physician in his dealings with these parties be referred to the Association for statistical documentation so that the Association may know what avenues to proceed into with regard to expansion of such a department.
- In regard to patient screening programs by medical students, Board instructed MASA's President to correspond with the director of the program stating that the program should be communicated on a statewide basis so that prior knowledge of the program can be obtained by the county medical society before instigation of such a program. ■

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Auxiliary



Mrs. George F. Scofield
President

LOOKING TOWARD DALLAS

ONE of the highlights of this Auxiliary year will be the 53rd annual convention of the American Medical Association Auxiliary to be held in Dallas, Texas June 27-30. In the opening session, the seven delegates from Alabama will answer roll call in the order of our admission to the Union. We will be 22nd—right after Illinois and just before Maine.

Alabama has a rich heritage in national auxiliary affairs, having contributed three of its most distinguished presidents. Mrs. Seale Harris served in 1925-26. Mrs. Wm. G. Thuss, Sr. was at the helm in 1962-63. Mrs. John Chenault, now on the AMPAC board, was president for the year 1969-70. Another Alabama daughter, Mrs. Ben Johnson, now serving as a Director, has been nominated to be the 1976-77 AMA Auxiliary's First Vice-President.

Addressing the convention will be Dr. Max Parrott, President of the AMA, Dr. Kenneth Sawyer, President of the AMA Education and Research Foundation and Mr. Roy Pfautch, President of Civic Service, Inc., on "The Mood of America."

SPECIAL luncheon speakers will be Bess Myerson, Consumer Advocate and Dr. Michael E. DeBakey, President and Chairman of the Department of Surgery, Baylor College of Medicine.

Auxilians are invited to view the recently restored Aldredge House, a 1917 mansion which is now headquarters for the Dallas County Medical Auxiliary.

The delegates to this convention have the privilege of choosing a new national auxiliary seal. This is necessary because of the omission of "Woman's" from our name. Nine seals will be displayed and voted upon. Six of these were chosen from seals submitted from all the states.

This meeting offers opportunities for planning for the coming year. Workshops will be held on Legislation, Membership – to be led by our own Ruth Johnson, Project Bank, AMAERF and one for Treasurers. Your president has been invited to participate in a Panel Discussion on Communication. It is a time for greeting old and new friends – a time for information and for inspiration.

Meet you there! ■

Pres.—Mrs. George F. Scofield/**Pres.-Elect**—Mrs. John S. Taylor/**First Vice-Pres.**—Mrs. Aubrey Terry/**NE Vice-Pres.**—Mrs. Eugene H. Bradley/**SE Vice-Pres.**—Mrs. Rufus Lee/**SW Vice Pres.**—Mrs. William P. Basoon/**NW Vice-Pres.**—Mrs. Wilfred Yeargan/**AMASA Editor**—Mrs. William Smith.

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Continuing Medical Education BY LARRY DIXON

Infectious Disease And Allergy

Directions: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one that is best in each case.

1. As long as he can remember, a 27-year-old man has noticed wheals on his skin when he is cold. Similar lesions appeared on his now three-year-old son a few minutes after delivery and have recurred transiently on exposure to cold. The patient has little itching, but more severe exposure to cold results in headache, malaise and arthralgias. He feels well between attacks. An ice cube skin test produces no wheal and tests for cryoglobulin and cryofibrinogen are negative. After he is exposed in a cold room, his leukocyte count is 20,100/cu mm with 1 per cent eosinophils, but values for complement (C'1 and C'4) are found to be normal. With respect to this clinical picture, which of the following statements is correct?
   (A) C'1 esterase inhibitor will be found deficient in the serum
   (B) Blood taken during an attack will show an abnormal histamine level
   (C) Women with this heritable trait frequently die from laryngeal edema
   (D) The methacholine intradermal test will probably elicit an abnormal response
   (E) The patient's longevity will not be affected by this condition

   A 30-year-old paraplegic patient with an indwelling catheter and extensive undermined decubitus ulcers develops fever and chills. During the next 24 hr, his leukocyte count increases from 9000 to 40,000/cu mm (with a shift to the left), and his hemoglobin decreases from 11.5 to 6 gm/100 ml. Which of the following organisms most likely accounts for this patient's illness?
   (A) Proteus vulgaris
   (B) Pseudomonas aeruginosa
   (C) Streptococcus pyogenes (group A beta-hemolytic streptococcus)
   (D) Clostridium perfingens
   (E) Staphylococcus aureus
3. A 20-year-old man presents with fever, arthralgias and a petechial eruption over his lower extremities of six hours' duration. He develops a stiff neck while in the emergency room. There are no abnormal findings on microscopic examination of the cerebrospinal fluid. Immediate antibiotic therapy is initiated. Which of the following would be the most appropriate therapeutic regimen?
   (A) Methicillin, 6 gm/day, intravenously
   (B) Ampicillin, 2 gm/day, orally
   (C) Penicillin G, 24 million units/day, intravenously
   (D) Sulfisoxazole (Gantrisin), 6 gm/day, intravenously
   (E) Chloramphenicol, 3 gm/day, intravenously
4. A 41-year-old pigeon breeder enters the hospital with cough, fever and a localized infiltrate in the right lower lobe. A lumbar puncture is performed because of persistent headache and nuchal rigidity. Cerebrospinal fluid findings are: leukocyte count 80/cu mm with 70 per cent lymphocytes; glucose less than 25 mg/100 ml; protein 120 mg/100 ml. Which of the following diagnostic tests should be performed next?
   (A) Serum complement fixation test for psittacosis
   (B) Cerebrospinal fluid complement fixation tests for histoplasmosis
   (C) India ink preparation on cerebrospinal fluid
   (D) Cerebrospinal fluid alcohol determination
   (E) Cerebrospinal fluid gamma globulin determination
5. Transient pulmonary infiltrates, episodic wheezing, low-grade fever and expectoration of brown plugs are features most characteristic of
   (A) allergic bronchopulmonary aspergillosis
   (B) systemic sclerosis (scleroderma)
   (C) Goodpasture's syndrome
   (D) sequoiosis
   (E) byssinosis
6. A 48-year-old woman has xerostomia, keratoconjunctivitis, and a bilateral sensory trigeminal neuropathy. Marked hyperglobulinemia and antinuclear antibodies in a titer of 1:64 are found. Which of the following is the most likely diagnosis?
   (A) Polyarteritis
   (B) Systemic lupus erythematosus
   (C) Chronic alcoholism
   (D) Sjogren's syndrome
   (E) Waldenstrom's macroglobulinemia
7. A 22-year-old man develops a furuncle in the nasal vestibule that is accompanied by edema in the malar and periobital areas, but no fever. Which of the following would constitute the management of choice?
   (A) Administration of ampicillin, 2 gm/day, orally
   (B) Administration of penicillin G, 600,000 units/day, intramuscularly
   (C) Administration of cloxacillin (Obenin), 2 gm/day, orally
   (D) Administration of tetracycline, 2 gm/day, orally
   (E) Administration of vancomycin (Vancocin), 2 gm/day, orally
8. Each of the following statements about tetracycline compounds is correct EXCEPT:
   (A) Anaphylactic reactions have been reported after oral administration
   (B) Intestinal absorption may be decreased in the presence of antacids
   (C) Excessive levels in the blood can cause fatal liver damage
   (D) They may cause increased intracranial pressure even when given in the usual therapeutic dosages
   (E) They do not cross the placental barrier and are therefore "safe" drugs to administer to pregnant women



SIGHTS & SOUNDS

The following films are made available from Eaton Laboratories. They may be obtained by either contacting your local Eaton representative or by writing to Eaton Medical Film Library. Eaton Laboratories Division, Morton-Norwich Products, Inc., Norwich, New York 13815.

BURN THERAPY

The Management of Severe Burns in Children (741)—E. Thomas Boles, Jr., M.D. The burn unit at Children's Hospital is used to demonstrate the author's experience in the successful management of burned children. The photographic record includes the treatment upon arrival of one patient in the emergency room immediately following a burn accident. Treatment is followed through the successful completion of grafting procedures. Immediate care of the burn wound, procedures during the shock phase, fluid replacement, prevention of infection, proper nutrition, prevention of anemia, secondary care of the burn wound, grafting and prevention of infection are demonstrated. 16 mm., color and sound, 25 minutes (1965).

Release of Burn Scar Contracture of the Knee (798)—John A. Boswick, Jr., M.D. The purpose of this film is to demonstrate the correction of an early post-burn contracture of the popliteal space. This severe contracture occurred within a few weeks after burning and closure of the wound by split thickness grafts. The severity of the contracture necessitated early surgical release. An excellent cosmetic and functional result is obtained by excision of the contracture and coverage of the defect with thick split thickness skin. 16 mm., color and sound, 10 minutes (1969).

CME

9. Antibiotics are useful in the treatment of each of the following causes of malabsorption EXCEPT
   (A) systemic sclerosis (scleroderma)
   (B) jejunal diverticulum
   (C) intestinal lipodystrophy (Whipple's disease)
   (D) celiac-sprue disease (nontropical sprue)
   (E) tropical sprue
10. Amphotericin B therapy is indicated for each of the following systemic infections EXCEPT
   (A) coccidioidomycosis
   (B) histoplasmosis
   (C) candidiasis
   (D) nocardiosis
   (E) cryptococcosis

ANSWERS

1. E	6. D	2. D	7. C
3. C	8. E	4. C	9. D
5. A	10. D		

Staged Reconstruction of a Severely Burned Hand (806)—John A. Boswick, Jr., M.D. This film is designed to show the value of early repeated operations in correcting severe burn deformities in the hands of children. The first procedure described in this film shows the release of a flexion-adduction contracture of the thumb and flexion contractures of digits. These contractures were corrected by excision of scar and replacement with very thick skin grafts. In a matter of months, a second procedure was required. The second procedure was much less extensive and was performed on a hand that had been supple due to use. 16 mm., color and sound, 20 minutes (1970).

Surgical Management of Eyelid Burns (766)—John A. Boswick, Jr., M.D. This film demonstrates the use of large, free, full thickness skin grafts in the correction of eyelid contractures resulting from thermal injuries. The principles of contracture release and correction with skin grafts are the main points stressed by this procedure. A few details of technique are discussed in the narration. The essentials of post-operative management are also discussed and the long term results are shown with close-up pictures that reveal the increase in function obtained by the procedures. 16 mm., color and sound, 10 minutes (1967).

Surgical Management of an Axillary Burn Web (768)—John A. Boswick, Jr., M.D. This film portrays an axilla webbing resulting from a thermal injury on the trunk and arm of a five year old child. The webbing occurs in an area that sustains little or no injury or tissue damage. Therefore, the correction is carried out through normal tissue and can be performed earlier than most contractures. It is performed at an early date in this patient in order that she may have full use of her extremity and not develop abnormal habits. It is fully appreciated that any delay in correcting this contracture would probably result in the loss of shoulder function. 16 mm., color and sound, 12 minutes (1967).

The Use of Split Thickness Skin Grafts in Contractures of the Elbow (767)—John A. Boswick, Jr., M.D. This film demonstrates the development of a very severe soft tissue, muscular, and capsular contracture at the elbow in a burned patient. To release this contracture, it was necessary to cut the biopsy tendon. The defect created by the release of the contracture had exposed muscle tendon, nerves, and vessels present. These structures were covered and the defect closed by a very thick split thickness skin graft. The functional and cosmetic results obtained by this procedure are both excellent as demonstrated by a nine-month post-operative film. 16 mm., color and sound, 10 minutes (1967).

Special Audio-Visuals Available

A Critical Difference—A 54-minute film that takes up where the national networks left off. It delves into the question – who's competent to run American medicine—physicians or clerks? A limited number of copies are available for free loan to medical societies. Contact: Robert Martin, American Medical Association, Radio, TV, Film Department, 535 N. Dearborn Street, Chicago, Il. 60610.

For further information on "The Spirit of 1776" slide presentation on Dr. Joseph Warren contact: AMPAC, P. O. Box 4449, Chicago, Il. 60680. ■

CME CALENDAR

JULY

● July 12-17, "Topics In Clinical Hematology and Oncology: Disorders of the Lympoid and Plasma Cells," ACP, Waterville, Maine.

● July 16-18, Food Allergy Meeting, Sheraton Inn, Government St., Mobile. Sponsored by Univ. of Miami School of Medicine & The Miller Foundation, Inc. Approved for 18 Course Hours Category 1, A.M.A. and F.M.A. Contact: J. B. Miller, M.D., Suite 110, Three Office Park, Mobile 36609.

● July 17-18, American Society of Oral Surgeons, Chicago, Illinois. Contact: 211 East Chicago Ave., STe 930, Chicago 60611.

AUGUST

● August 6, 7, 8 — MASA's "Diabetes Mellitus" Conference, Olympia Spa, Dothan, Alabama. 10 AMA Category 1 Credit hours—10 AAFP Prescribed hours—10 hours, MASA's education requirement.

● August 25-28, "Pediatric Therapy For Primary Physicians," Lake Guntersville State Park. Sponsored by the University of Alabama in Huntsville School of Primary Medical Care. Approved 15 hrs. Category I credit and 15 prescribed hrs. AAFP. Contact: Ambulatory Care Center, 201 Governors Drive, Huntsville 35801. Attn.: Ms. Rosemary Little.

● August 28-29 "Pediatric Orthopedic Radiology," Monteleone Hotel, New Orleans. Contact: Ms. Wanda Patton, Institute for Pediatric Radiology, 4148 N. Cleveland Ave., Kansas City, Mo. 64117.

SEPTEMBER

● Sept. 4-5, AMA Regional CME Meeting, Jackson Hole, Wyoming.

● September 5-9, 1976, Estes Park Institute & the Southeastern Hospital Conference, "Regional Hospital Medical Staff Conference," Grove Park Inn - Great Smoky Mountains, Asheville, North Carolina, Category I credit available.

● Sept. 10-12, AMA Regional CME Meeting, Portsmouth, N.H.

● Sept. 11-12, AMA Regional CME Meeting, Milwaukee, Wisconsin.

● September 17, 18, 19 — MASA's "Diabetes Mellitus" Conference, Lake Guntersville, Guntersville, Alabama. 10 AMA Category 1 Credit hours—10 AAFP Prescribed hours—10 hours, MASA's education requirement.

● Sept. 20-22, Am. Cancer Society—National Cancer Institute, St. Louis, Mo. Contact: Dr. Sidney L. Arje, 777 Third Ave., New York 10017.

● Sept. 20-23, Am. Academy of Family Physicians Annual Meeting, Boston, Mass. Contact: 1740 W. 92nd St., Kansas City, Mo. 64114.

● Sept. 20-23, Am. Hospital Assoc. Annual Meeting, Dallas, Texas. Contact: 840 N. Lake Shore Dr., Chicago 60611.

● Sept. 29-Oct. 3, Southern Perinatal Assoc. Annual Meeting, Galatea Inn, Pensacola, Fla.

OCTOBER

● October 1-3 "Diabetes Mellitus" Conference, Gulf Shores State Park, Gulf Shores, Alabama. 10 Category I and prescribed credit hours. Contact: MASA's Education Department.

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WEEKLY SCHEDULE
CONTINUING MEDICAL EDUCATION
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FOR THE PHYSICIAN IN PRACTICE

MONDAY

Time		Room
6:30 a.m.	GYN Floor Rounds	
7:30 a.m.	OB Floor Rounds	
7:30 a.m.	Urology Floor Rounds	
7:30 a.m.	Orthopedic Floor Rounds	
10:30 a.m.	Psychiatry - Clerkships	
*12:00 N	Urology Conference	C
*12:00 N	Pulmonary & Hematology Conference - Medicine	A
1:00 p.m.	Pediatrics Floor Rounds	
1:00 p.m.	Pediatrics X-ray Rounds	
*1:15 p.m.	Neuroradiology Conference	E
*2:30 p.m.	Neurology-Neurosurgery Conference	B
3:30 p.m.	Neurosurgery Grand Rounds	
7:00 p.m.	Orthopedic Journal	C
7:00 p.m.	Orthopedic Hand Conference	

TUESDAY

Time		Room
7:30 a.m.	OB/GYN Floor Rounds	
7:30 a.m.	Surgery Red Service Rounds	
*8:00 a.m.	Pediatrics Death Conference (4th Tuesday of Month)	A
8:00 a.m.	Pediatrics Seminar (1st, 2nd & 3rd Tuesday)	A
10:30 a.m.	Psychiatry Clerkships	
*11:00 a.m.	Neuro Case Conference	C
*12:00 N	Cardiology Conference Medicine (1st, 3rd & 4th Tuesday)	A
12:00 N	Rheumatology Conference Medicine (2nd Tuesday)	
12:30 p.m.	OB/GYN Department Conference	D
1:00 p.m.	Pediatrics Immunology Infections Disease Floor Rounds	J
4:30 p.m.	Vascular Surgery Conference	A
5:00 p m.	Pediatrics Pulmonary Rounds	K
8:00 p.m.	Pediatrics Journal Club	H

WEDNESDAY

Time		Room
7:30 a.m.	OB/GYN Floor Rounds	
*8:00 a.m.	Family Practice Conference	A
8:15 a.m.	Ortho-Path. Conference (Alternate weeks)	A
8:15 a.m.	Gyn-Path Conference (Alternate weeks)	A
9:00 a.m.	Gyn-Pathology Rounds	
9:45 a.m.	Orthopedic Floor Rounds	
10:30 a.m.	Psychiatry Clerkships	
*12:00 N	Pathology Conference Medicine (every Wednesday)	A
1:00 p.m.	Pediatrics Floor Rounds	
2:00 p.m.	Pathology Conf. (OB/GYN) Every other Wednesday	A
4:00 p.m.	Surgery-Mortality and Morbidity Conference	C
*4:00 p.m.	Neuroradiology Conference (5th floor Conference Rm.)	
5:00 p.m.	Radiology Rounds	K

THURSDAY

Time		Room
7:00 a.m.	OB/GYN Floor Rounds	
7:30 a.m.	Surgery Green Service Rounds	
8:00 a.m.	OB/GYN Grand Rounds	I
*8:00 a.m.	Medicine Grand Rounds	A
10:30 a.m.	Psychiatry Clerkships	
11:00 a.m.	Pediatrics X-ray Rounds	K
12:00 N	College of Medicine Research Rounds - Campus	
*12:00 N	Medicine, Mortality and Morbidity Conference	A
12:00 N	Perinatal Mortality Conference (3rd Thursday of month)	D
1:30 p.m.	Surgical Chiefs Conference Closed	
*3:00 p.m.	Tumor Conference Medicine	A
5:00 p.m.	Urology Floor Rounds	A
*5:00 p.m.	Psychiatrics Grand Rounds (3rd Thursday)	A

FRIDAY

Time		Room
6:30 a.m.	GYN Floor Rounds	
7:30 a.m.	OB Floor Rounds	
*7:30 a.m.	Surgery Grand Rounds	A
*7:30 a.m.	Orthopedic Conference	F
*8:00 a.m.	Pediatrics Grand Rounds	
8:30 a.m.	Orthopedic Grand Rounds	F
9:00 a.m.	Surgery Blue Service Rounds	
10:30 a.m.	Psychiatry Clerkships	
11:00 a.m.	Correlation Conference Anatomy - Campus	G
12:00 N	Urology Conference - Clerks	
*12:00 N	Endocrine - GI - Renal Conference Medicine	A
1:00 p.m.	Pediatric Floor Rounds	J

Room	Location
A	Assembly Room
B	Physician's Dining Room
C	Private Dining Room
D	Mastin 202
E	Morgue
F	West Cafeteria
G	Campus - MSB
H	Various Homes
I	3rd Floor Desk - Hospital
J	4th Floor Desk - Hospital
K	X-ray

*Denotes Approval for: Category I Credit for AMA Physicians Recognition Award and/or American Academy of Family Practice - AAFP.

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FREDERICK S. WOLF, M.D., DIRECTOR

INFLUENZA

There is to be a mass influenza immunization program during the summer and fall to provide a bivalent vaccine to the over 65 and chronically ill group and a monovalent vaccine for those 5 to 65 years of age. The justification for this massive effort to protect our population against "Swine Influenza" (A/New Jersey/76 (H_1N_1) is based upon the known introduction of a "new" influenza virus in approximately ten-year cycles and the recently demonstrated human to human transmission of A/New Jersey/76 is an associated A/Victoria outbreak at Fort Dix, New Jersey, in January-February 1976.

In 1975 there were estimated to be over a million cases of influenza nationally with a concomitant excess mortality attributed to the illness. No acceptable data are available to indicate the percentage of these cases immunized by influenza vaccines. Only 20 of Alabama's reported 6,309 cases were confirmed by growth and identification of the virus – all were A/Victoria. In fact, there has never previously been attempted in the general population a systematic program for control of this viral disease. Perhaps past failure to immunize the total elderly and chronically ill group is due to the need for annual influenza immunization – the vaccine does not produce permanent immunity.

An earlier note appearing in the *Journal* presented a brief discussion on the derivation of "new" influenza viruses and discussed in limited fashion the known cases of A/New Jersey/76 in humans.

One of the best statements available to the writer appeared in *Hospital Practice*, June 1976, authored by Dr. Edwin D. Kilbourne. The last two paragraphs are quoted:

"At best, immunization of most Americans with swine influenza vaccine will prevent thousands of deaths, millions of illnesses, and the loss of billions of dollars. For the first time in history, the impact of pandemic influenza – the last great plague – will have been blunted by human intervention. At worst, the effort will have been in vain, if spread of the virus does not extend beyond Fort Dix, N.J. To say the program is a gamble is correct, but there is no middle ground, and the stakes are very high indeed if the alternative (nonimmunization) is ventured and lost.

"Much will be learned in the implementation of this program and the study of influenza this coming winter. Crash programs of any sort must be viewed as stopgaps that reflect lack of planning or ignorance of the disease. The ultimate control of influenza will require, as perhaps for no other disease, definitive understanding of the molecular nature of the virus, the reasons for its inherent mutability, and the development of better vaccines or chemoprophylactic agents. This all adds up to an obligatory expansion of basic virologic and immunologic research."

An editorial in the *New England Journal of Medicine*, Vol. 294, No. 19, page 1059, by Dr. Louis Weinstein: "The discussion presented in this paper emphasizes to all of us that disease prevention is an essential part of medicine."

VENEREAL DISEASE

A questionnaire sent to 200 General Practitioners, Internists, and Urologists contained two questions: "How do you treat syphilis?" and "How do you treat gonorrhea?" There was also a request that the physician not sign his name. We received 190 answers.

FEWER THAN 50% TREATED SYPHILIS ACCORDING TO CURRENTLY ACCEPTED RECOMMENDATIONS.

FEWER THAN 50% TREATED GONORRHEA ACCORDING TO CURRENTLY ACCEPTED RECOMMENDATIONS.

GONORRHEA–MAY 1976

Total Female Specimens	20,396
Positive Cultures	,963
Positive	4.7%
Submitted from Private Practice	11,647
Positive Cultures	,248
Positives	2.1%

CURRENT MORBIDITY STATISTICS

	April	May	*E.E. May
Tuberculosis	57	86	94
Syphilis	40	38	45
Gonorrhea	1,734	2,055	749
Chancroid	1	0	0
Typhoid fever	0	0	0
Salmonella	24	37	25
Undulant fever	0	1	0
Shigella	9	9	7
Amebic dysentery	0	0	0
Scarlet fever & strep throat	545	650	438
Diphtheria	0	0	0
Whooping cough	0	0	2
Meningitis	10	10	6
Tularemia	0	0	0
Tetanus	0	0	0
Poliomyelitis	0	0	0
Encephalitis	0	1	0
Smallpox	0	0	0
Measles	0	0	12
German measles	0	0	7
Chickenpox	35	67	72
Mumps	46	55	81
Hepatitis	45	35	36
Typhus fever	0	0	0
Rocky Mt. spotted fever	0	0	0
Malaria	0	0	1
Rheumatic fever	4	2	8
Rheumatic heart	19	15	18
Influenza	311	217	36
Pneumonia	306	598	331
Rabies - Human Cases	0	0	0
Pos. animal heads	2	3	0

As reported by physicians and including deaths not reported as cases. *E.E. The estimated expectancy represents the median incidence of the past nine years.

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Necrology

Thomas Brannon Hubbard, Sr., M.D.
1887-1976

Dr. Thomas Brannon Hubbard, Sr., one of Alabama's leading surgeons and founder and owner of Hubbard Hospital in Montgomery, died Sunday, May 16, at his Montgomery home after an extended illness. He was 89 years of age.

Dr. Hubbard established Hubbard Hospital in 1919 and operated it from the site where Jackson Hospital is now located until the hospital closed in 1957. He retired from active practice in 1966, but served as chairman of the Alabama Cancer Society Board until 1971.

Dr. Hubbard was a graduate of the Columbia University College of Physicians and Surgeons. He served on the Board of Censors from 1936 to 1951 and was president of MASA from 1951 to 1952. He served as president of the Alabama Chapter of the American College of Surgeons in 1955.

Jonas Hartsell Stewart, Jr., M.D.
1928-1976

Dr. Jonas Hartsell Stewart, Jr., Selma, was killed Thursday, May 13, in a traffic accident on Highway 80, west of Montgomery, State Troopers' reports indicate that Dr. Stewart died instantly as he was thrown from his car when it struck a vehicle parked on the highway.

A graduate from the George Washington University School of Medicine, Washington, D.C., he served as a flight surgeon in the United States Air Force. In 1961, Dr. Stewart began his practice in Selma.

He was active in the Dallas County Medical Society, Kiwanis Club, Quarterback Club and the United States Coast Guard Auxiliary.

James Orville Morgan, Sr., M.D.
1893-1976

Dr. James Orville Morgan, Sr., former MASA president and former member of the Board of Censors, passed away Tuesday, June 8, at a local hospital in Gadsden following a brief illness. Dr. Morgan was 82 years of age. A graduate of Emory University School of Medicine, Dr. Morgan interned at St. John's Hospital in Pittsburgh. He completed his surgical training at the University of Vienna, Austria. Following a tour of service with the army during World War I, he settled into surgical practice in Gadsden.

In 1919, he established the Walnut Street Infirmary in Gadsden and operated the infirmary until the Holy Name of Jesus Hospital was opened in the mid-1920s.

Dr. Morgan served as a member of the Board of Censors from 1947 to 1952 and was elected president of MASA in 1953. He was a diplomate of the American College of Surgeons and the International College of Surgeons. Survivors include his wife and a son, Dr. J. Orville Morgan, Jr., Gadsden surgeon. ■

PHYSICIANS' PLACEMENT SERVICE IN ALABAMA (CONTINUED FROM PAGE 55)

Opportunity for **General Practitioner** in town of 3,000 population; trade area 16,000 population located in southeast Alabama, within short distance of city of 35,000 population where there are two hospitals. Located 85 miles from Gulf Coast beaches. Office space and equipment available. Last physician in town died two years ago. Industrial and farming area. Churches, schools and recreational activities. PW-2.

Opportunity for **General Practitioner** in town of 4,000 population; trade area 30,000 population located in southeast Alabama within short distance of hospitals. One g.p. and two dentists presently in the town. Agricultural and industrial area. PW-3.

General Practitioner—Opportunity in central Alabama town of 5,000 population, with a trade area of 30,000 population. Located 30 miles east of Montgomery, Alabama, and 28 miles west of Auburn University. Adjacent to Lake Martin. A new 77-bed hospital with a new Medical Arts Complex adjoining with office space available. Guaranteed income for a General Practitioner or Family Physician. PW-4.

General Surgeon needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36-bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-13/1.

Full-time Faculty Position: Board Certified **Family Physician** to teach/practice in new and growing medical school. Teach family practice residents/medical students. Competetive salary/fringe benefits. An affirmative action/equal employment opportunity employer. PW-5.

GENERAL PRACTITIONER needed in progressive rural community of about 1,000 people with trade area of 20,000, for 36 bed, joint commission approved hospital. Located in East Central Alabama, within 90 miles of Atlanta, 100 miles of Montgomery and Birmingham, and within 20 minutes of I-20. Guaranteed office space with rent to be worked out. Interested parties and their families are invited to visit with expenses paid. PW-13

Tri-community area of approximately 20,000 population located in a tri-city area of approximately 200,000 population in south central Alabama is seeking a **General Practitioner**. Existing building available for renovating. Churches, schools, recreational facilities; also military privileges and services available in the area. PW-1.

General Surgeon wanted. Tremendous opportunity to associate with General Surgeon in North Ala. Located in

CONTINUED ON PAGE 66

LOCATIONS WANTED

Locum Tenens — Age 30; Georgetown University 1971, National Board, American Board eligible, interested in general medicine, pediatrics, or emergency room coverage. Available July 1 - Sept. 1, 1976, preferably in northeast Alabama, Anniston, Gadsden, or Birmingham area.

Digest of actions—State Committee of Public Health

The State Committee of Public Health at its regular meeting on May 19, 1976, took the following actions:

- Approved Deputy Registrar in Jefferson County.
- Confirmed appointment of S. D. Waldrop, M.D., as County Health Officer of Dallas County for five years, effective June 1, 1976.
- Accepted offer of the Alabama State Nurses' Association to volunteer its services to assist in the massive Swine Flu Immunization Program.
- Received summary report of Alabama's Tuberculosis Program for 1975, indicating substantial reductions in tuberculosis cases, deaths and average hospital stay during the past ten years.
- Received report on the proposed influenza immunization scheduled which will begin September 6 in Jefferson County with 40 teams active, seven days a week. An organized schedule for the entire State, by date, was outlined to minimize travel and conserve on administrative expense.
- Received report on the public meeting regarding the proposed State Administrative Plan for P.L. 93-641. Further discussion on these issues was suggested after the final HSA regulations are received.
- Approved deferral of legislation on a Certificate of Need Bill at this time.
- Deferred to the July meeting consideration for an appointment to the National Council for Health Planning and Development.
- Recommended that Comprehensive Health Planning develop standards and criteria as an addition to the chapter on Home Health Care.
- Approved Assurance of Need for a Computerized Axial Tomography Unit for Brookwood Medical Center at Homewood.
- Approved the endorsement of the Emergency Medical Technician Advanced Training Program at George C. Wallace Junior College at Dothan on a continuing basis following a successful pilot program.
- Approved two Medicaid Plan Amendments, one excluding from Medicaid persons eligible for, but not receiving, public assistance in August, 1972, and a change clarifying optional State Supplemental Payment Groups with relation to maximum payment and maximum needs.
- Was advised that Electronic Data Systems, Texas, received the low bid for Medicaid Fiscal Intermediary for the next fiscal year, beginning October 1, 1976.
- Authorized Dr. Ronald Henderson to testify for the Board in support of an Anti-Abortion Bill supported by the Committee for over a year and to testify on other abortion and anti-abortion measures being heard by the Legislature concurrently with the State Committee of Public Health meeting. ■

PHYSICIANS' PLACEMENT SERVICE

CONTINUED FROM PAGE 65

the heart of Tennessee Valley Mountain Lake Region. Small town setting, pop. 10,000. Two hospitals (300 beds), ten minutes from Decatur, pop. 45,000. Thirty minutes from Huntsville. Unlimited recreational activities; golf, tennis, sailing. Excellent school system and cultural activities. PW-12 ■

Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

ROCHE

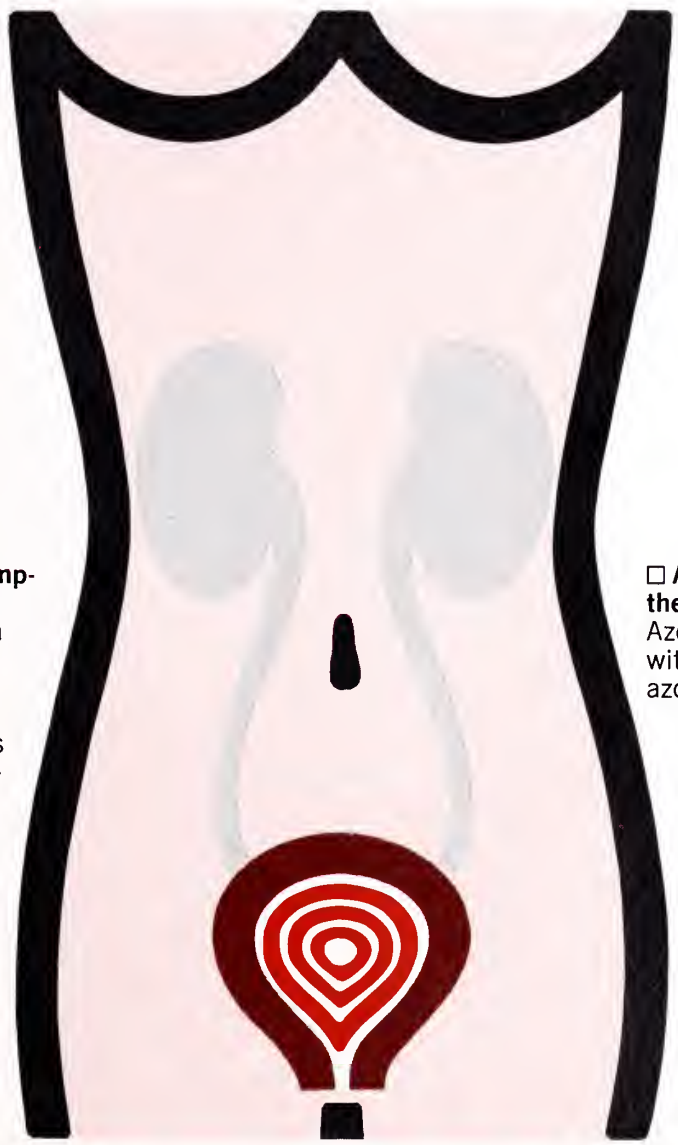
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley New Jersey 07110

When pain complicates acute cystitis*

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain for the pathogens



☐ **Early relief of painful symptoms** such as burning and discomfort associated with urgency and frequency.

☐ **Effective control of susceptible pathogens** such as *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris.*

☐ **Appropriate antibacterial therapy:** up to three days with Azo Gantanol, then 11 days with Gantanol® (sulfamethoxazole).

*nonobstructed; due to susceptible organisms

ROCHE

DYAZIDE®

Trademark

Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without

been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

Upjohn
The Upjohn Company, Kalamazoo, Michigan 49001

Medrol® 4 mg Dosepak*
methylprednisolone, Upjohn

The explicit printed dosage instructions that accompany each Dosepak make it easy for the patient to understand and follow the dosage regimen.



*Trademark



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

□ Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
□ Can relieve nausea and vomiting often associated with vertigo:*
□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
□ Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
□ Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

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Postgraduate Education For Pediatricians And Obstetricians

The Maternal and Child Health Program of the University of California School of Public Health at Berkeley announces postgraduate programs for pediatricians and obstetricians in the field of Maternal and Child Health and Family Planning. Program areas available at the present time include nine-month programs in Maternal and Child Health, in the Health of the School-Age Children and Youth, and Day Care and the Preschool Child.

Twenty-one month programs in Care of Handicapped Children and Comprehensive Health Care, and a thirty-three month program in Perinatology are also available. These programs all lead to the degree of Master of Public Health, and tax-exempt Fellowship support is available.

Applications are now being accepted for the group entering September, 1977. For information, write to Helen M. Wallace, M.D., School of Public Health, University of California, Berkeley, California 94720. ■

MISS BROCK RECEIVES M.D. DEGREE; SPECIAL MERIT AND SIMS AWARDS

Dana Brock of Montgomery has received her M.D. degree, cum laude, from the University of Alabama School of Medicine in Birmingham.

Miss Brock also received the Special Merit Award and the J. Marion Sims Award which is given yearly to a member of the graduating class who has shown outstanding abilities in obstetrics and gynecology.

A graduate of Robert E. Lee, she received a B.S. degree in Pharmacy at Auburn University.

Miss Brock, daughter of Mr. and Mrs. Dan Brock, Montgomery, begins a residency in internal medicine at the Yale Medical Center, New Haven, on July 1, 1976.

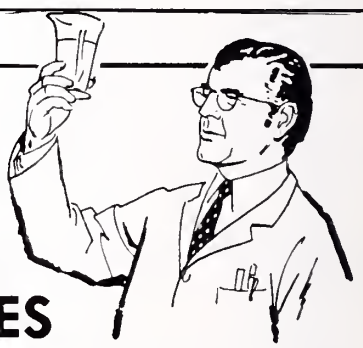
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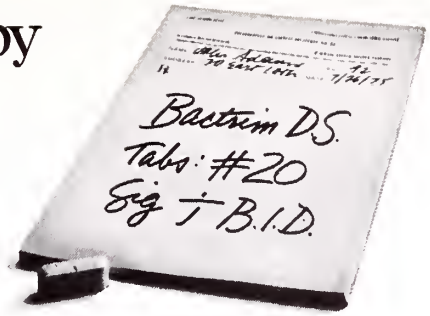
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While adverse reactions noted in this study were mild (*e.g.*, vomiting, nausea, rash), more serious reactions can occur with these drugs. See manufacturer's product information for complete listing. Maintain adequate fluid intake; perform frequent CBC's and urinalyses with microscopic examination.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Bactrim™ DS
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Double Strength tablets
Just 1 tablet B.I.D.

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For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

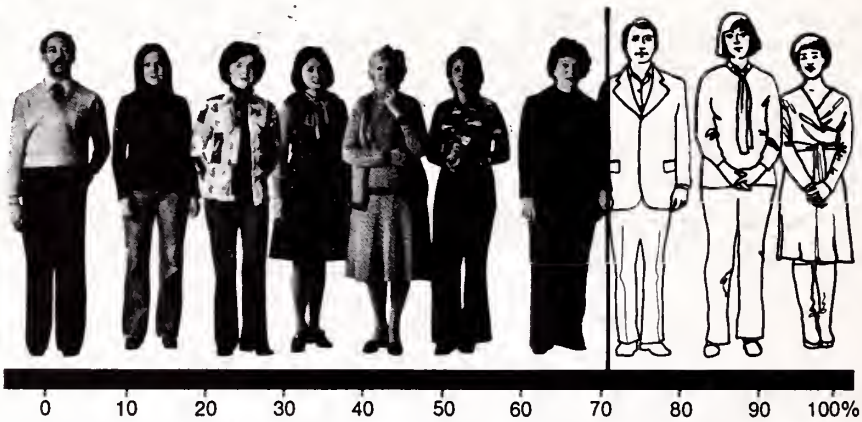
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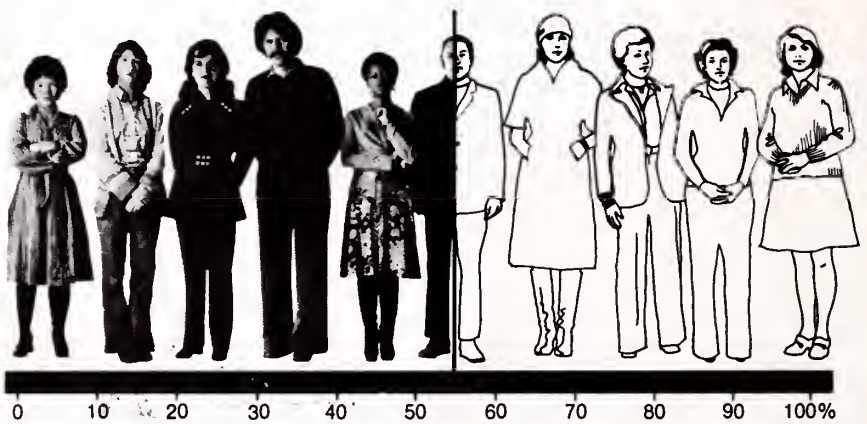
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†Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

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